IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

TOUCHSTREAM TECHNOLOGIES, INC. LTD.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	NO. 2:23-CV-00059-JRG
	§	(Lead Case)
CHARTER COMMUNICATIONS, INC., et al.,	§	
	§	
Defendants.	§	

TOUCHSTREAM TECHNOLOGIES, INC. LTD.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	NO. 2:23-CV-00062-JRG
	§	(Member Case)
COMCAST CABLE COMMUNICATIONS, LLC d/b/a XFINITY, et al.,	§	
	§	
Defendants.	§	

CLAIM CONSTRUCTION ORDER

Before the Court is Touchstream Technologies, Inc.'s Opening Claim Construction Brief filed by Plaintiff Touchstream Technologies, Inc. ("Plaintiff" or "Touchstream"). (Dkt. No. 36.) Also before the Court is Defendants' Responsive Claim Construction Brief filed by Charter Communications, Inc., et al. and Comcast Cable Communications, LLC, d/b/a Xfinity, et al. (collectively, "Defendants" and with Plaintiff, the "Parties"). (Dkt. No. 40.) Also before the Court

is Touchstream Technologies, Inc.'s Reply in Support of Its Opening Claim Construction Brief. (Dkt. No. 42.) The Court held a hearing on May 30, 2024. Having considered the Parties' briefing along with arguments of counsel, the Court resolves the disputes as ordered herein.

I. BACKGROUND

Plaintiff alleges infringement of three patents: U.S. Patent No. 8,356,251 ("the '251 Patent"); U.S. Patent No. 11,048,751 ("the '751 Patent"); and U.S. Patent No. 11,086,934 ("the '934 Patent") (collectively, the "Patents-in-Suit"). The Patents-in-Suit all derive from the same patent family and are about casting and controlling content from a personal device, like a smartphone or tablet, to a second display unit, such as a TV or a computer monitor.

The Patents-in-Suit all claim priority to the same provisional application and share the same specification. Accordingly, as the parties did in their briefing, citations in this Order will be to the specification of the '251 Patent.

The '251 Patent and the '751 Patent share the same title and abstract. The title is "Play control of content on a display device" and the Abstract states:

> A system for presenting and controlling content on a display device includes a network, a server system coupled to the network and comprising one or more servers, a display device coupled to the network and having a display, and a personal computing device operable to transmit a first message according to a specified format over the network to the server system. The server system stores an association between the personal computing device and the display device. The first message identifies user-selected content and a media player to play the content. The server system is operable, in response to receiving the first message from the personal computing device, to provide to the display device a second message identifying the user-selected content and the media player to play the content. In response to receiving the second message, the display device is operable to obtain a first media player needed to play the content, to load the media player and to present the content on the display.

The '934 Patent also bears the title "Play control of content on a display device," however, the Abstract differs as follows:

> A system for controlling playback of various types of content includes a first computing device that provides a unique identifier to a second computing device to establish an association there between. By virtue of the established association, the second computing device can send one or more messages to the first computing device, the one or more messages referencing a piece of content associated with a first media playing element of a plurality of media playing elements, and one or more commands corresponding to the first media playing element. The first computing device can select the first media playing element based on the received one or more messages, and control how the first media playing element plays the referenced piece of content utilizing the one or more commands.

II. LEGAL STANDARDS

"[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Innova/Pure-Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). "[T]he court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*); *aff'g,* 517 U.S. 370, 390 (1996).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Id*. at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

When construing claims, "[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning." *Aventis Pharm. Inc. v. Amino Chems. Ltd.,* 715 F.3d 1363, 1373 (Fed. Cir. 2013) (citing *Phillips,* 415 F.3d at 1312–13). Courts must therefore "look to the

words of the claims themselves . . . to define the scope of the patented invention." *Id.* (citations omitted). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.,* as of the effective filing date of the patent application." *Phillips,* 415 F.3d at 1313. This "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.*

The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office ("PTO") understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the

inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; *see Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that "a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation").

Intrinsic evidence, therefore, is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.,* 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips,* 415 F.3d at 1312). But for claim terms with less-apparent meanings, courts consider "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean[,] [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Phillips,* 415 F.3d at 1314 (quoting *Innova*, 381 F.3d at 1116). In those situations, "the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015) (citation omitted). "In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the 'evidentiary underpinnings' of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal." *Id.* (citing 517 U.S. 370).

However, the intrinsic record may not be sacrificed in favor of extrinsic evidence. According to *Phillips*, reliance on dictionary definitions, for example, at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id.* at 1321.

The Supreme Court of the United States has "read [35 U.S.C.] § 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.* The claims "must be precise enough to afford clear notice of what is claimed," but that consideration must be made while accounting for the inherent limitations of language. *Id.* at 908. "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

III. AGREED TERMS

The parties have submitted no agreed terms.

IV. DISPUTED TERMS

1. "media player"/ "media player application"/ "media playing application"

Claim Term	Plaintiff's Construction	Defendants' Construction
"media player" ('251 Patent, claims 1, 2)	Plain and ordinary meaning	"application software for playing back video content"
"media player application" ('751 Patent, claims 12, 13, 14, 16) "media playing application" ('934 Patent, claims 17, 18, 19)	Plain and ordinary meaning	"application software for playing back content"

The dispute over these claim terms is whether the prosecution history disclaimer applies to limit the meaning as Defendants propose.

During prosecution of the ’251 Patent, in response to an office action rejection, the applicant stated in a footnote: “In the context of the present application, it is clear that a ‘media player’ refers to application software for playing back the video content. Thus, the claims and specification refer in some cases, for example, to ‘loading’ or ‘unloading’ a media player. . . . A particular display device, therefore, may, in some cases, be able to load or store any one of different media players.” (Dkt. 40-2 at 11).

Defendants submit that their proposed construction should be adopted because it is the definition Touchstream advanced during prosecution. The specification, according to Defendants, confirm this definition because it makes clear that the claimed media player is application software, rather than hardware, and the media player is for playing back video content as opposed to content generally. Defendants further extend this construction to “media player application” and “media playing application” in the ’751 and ’934 Patents because “statements from prosecution of a familial patent relating to the same subject matter as the claim language at issue in the patent being construed . . . are relevant in construing the claims at issue.” *Ormco Corp. v. Align Tech., Inc*., 498 F.3d 1307, 1314 (Fed. Cir. 2007). For this term, however, Defendants remove the requirement for “video” content because the ’751 and ’934 Patents claims do not specify the type of content.

Plaintiff agrees that a “media player” is software for playing media but disagrees that it is a term that needs to be construed, arguing that it is a well-known, easily understood term to a jury. The prosecution history statement, according to Plaintiff, is coextensive with the plain and ordinary meaning and does not give rise to an actual claim scope dispute. Additionally, Plaintiff contends

that adding the "video content" limitation to "media player" in the '251 Patent is unwarranted because the claim language already includes that limitation. In sum, Plaintiff contends that turning a well understood term like "media player" into "application software" is more likely to confuse the jury than leaving the claim as is.

The Court first considers the term "media player" in the '251 Patent within the relevant portion of claim 1. The claim language clearly sets forth a "media player for playing the video content . . . including a universal playback control command for controlling playing of the video content on the display device by the particular media player." Defendants' proposed construction, "application software for playing back video content," duplicates language already written into the claim. So, including the latter clause of "for playing back video content" would repeat almost identical language that is already present and cause unnecessary confusion. The Court declines to add the redundant language. Accordingly, the remainder of Defendants' proposed construction for consideration is simply "application software" to replace the claim term "media player" due to statements from the prosecution history.

Turning to the '251 Patent file history, the cited language appears in a footnote in an office action response explaining that, by "media player," the applicant "refers to application software for playing back the video content" that can be loaded or unloaded onto a particular display device. (Dkt. 40-2 at 11.) The footnote appears in a section where the applicant was distinguishing the invention from prior art as to the limitation "one or more signals," and not based on the "media player." (*See id.*, at 14-17.) The purpose of the footnote appears to simply explain that the media player is software that can be installed or uninstalled on a display device. It was not a narrowing admission to overcome prior art. Indeed, software could not be a distinguishing feature of the invention because the Applicant acknowledged earlier on that the prior art already discloses a

software program. (*Id*. at 13) ("Schwartz [U.S. Pub. No. 2011/0060998A1] discloses a system and method for managing Internet media content. As illustrated in FIG. 2 (reproduced below), the system can include a computing device (*e.g*., a mobile phone) that executes an application 10 (i.e., a software program) . . . ."). Accordingly, the statement in the footnote is not the type of limiting representation about an invention that comes close to disclaiming claim scope. Indeed, Defendants do not even use the word "disclaimer" in making their argument here.

During the hearing, Defendants stated their agreement to identify the "software" within the construction and drop "application." Plaintiff also agreed that the "media player" is software. Accordingly, the Court will construe the term "media player" as "software for playing media."

As for the "media player applications" in the '751 Patent and the "media playing applications" in the '934 Patent, the Court agrees with Defendants that "[t]he common terminology and functions of these components suggest that the terms should be construed to have similar meanings with allowance for non-video content in the later two patents." (Dkt. 40 at 11.) After all, the three patents are all related, have the same specification, and similar claim structure. And in these instances, the meaning of the disputed terms is even more apparent. The terms each contain the word "applications," which makes it even more clear that the media player is software.

The Court therefore finds the claim terms **"media player" ('251 Patent claims 1, 2), "media player application" ('751 Patent claims 12, 13, 14, 16), and "media playing application" ('934 Patent claims 17, 18, 19) to mean "software for playing media."**

2. "a synchronization code"/ "the synchronization code"

Claim term	Plaintiff's Construction	Defendants' Construction
"a synchronization code" / "the synchronization code" ('251 Patent, claims 1, 8, 9, and '751 Patent, claim 12)	Plain and ordinary meaning	Must be the same "synchronization code" throughout the claim.

The dispute as to this term is whether it is necessary to construe "a synchronization code" and "the synchronization code," appearing in independent claims and dependent claims that depend therefrom, to explicitly instruct that each instance of "the synchronization code" must refer to the same synchronization code according to their antecedent basis relationship.

Ensuring that claim terms have proper antecedent basis is a well-settled attribute of patent drafting. The Manual of Patent Examining Procedure (MPEP) Section 2173.05(e) provides that a claim is unclear where it refers to "said lever" or "the lever" and the claim contains no earlier recitation or limitation of "a lever" and it is unclear as to what element the limitation was making reference. In that instance, the examiner should suggest corrections to resolve antecedent basis problems, such as revising the claim to identify "a lever" before reciting "the lever" to refer back to the previously identified lever. Moreover, the Federal Circuit has consistently held that a claim term that first appears with the indefinite article "a" and later appears with a definite article, such as "the," shares an "antecedent basis" relationship and apply an "initial assumption" that the latter occurrence carries the same meaning as the former. *See Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (finding a single "claim term should be construed consistently with its appearance in other places in the same claim"); *see also HowLink Global LLC v. Network Commc'ns Int'l Corp.*, 561 Fed. App'x 898, 903 (Fed. Cir. 2014) (claim

terms "[b]ased on [an] antecedent basis relationship . . . carry the same meaning throughout the claims."); *Digital-Vending Servs. Int'l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012) (a claim term "is presumed to have the same meaning throughout all of the claims in the absence of any reason to believe otherwise.").

During the hearing, Plaintiff agreed with Defendants that the antecedent basis rule applies such that "the synchronization code" refers back to the same "a synchronization code," and further that there is one synchronization code. Thus, there is no actual dispute in the scope or meaning of this term, which makes it unsuitable for claim construction. *See O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (Claim construction "is a matter of resolution of disputed meanings and technical scope . . . ."). The Court finds the antecedent basis rule applies but declines to provide Defendants with an explicit instruction to present before the jury in order to "impeach an expert who might contradict Touchstream's representation." (Dkt. 40 at 14.)

The Court therefore finds **"a synchronization code" and "the synchronization code" to have their plain and ordinary meanings.**

3. "synchronization code"

Claim term	Plaintiff's Construction	Defendants' Construction
"synchronization code" ('251 Patent, claims 1, 8, 9, and '751 Patent, claim 12)	Plain and ordinary meaning	"a code which can be obtained by a user from the [display device / content presentation device] and provided by the user to the [personal computing device / remote computing device]"

This issue concerns whether the user must be involved in obtaining the synchronization code from the display device or content presentation device and providing it to the computer device or remote computing device.

Plaintiff argues that nothing in the claims requires a user to obtain the synchronization code and that Defendants are seeking to insert unclaimed limitations derived from a single embodiment in the specification. Plaintiff cites to various specification disclosures that do not require user action, including one example where the display device may provide the synchronization code directly to the personal computing device without the user serving as an intermediary. (*See* '251 Patent, 2:16-26, 5:10-14, 5:21-23, 5:36-38.) Plaintiff further points to statements in the specification and dependent claim 9 to show that the IP and MAC addresses can be used as synchronization codes as well, to suggest that these types of data are typically transmitted automatically and not through acts of a user. (*See e.g., id.*, at 2:24-26.)

Defendants disagree, arguing that the specification makes clear that user action is necessary. Defendants draw a distinction within the disclosed embodiments between, on the one hand, using a synchronization code to create the association between the mobile phone and the display device, and on the other hand, display devices that have been pre-initialized for communication with the phone. In particular, Defendants argue that the latter example in the specification that does not require use of a synchronization code is not a claimed embodiment because the claims are not about pre-initialized display devices. Instead, Defendants argue that the '251 Patent claims 1, 8, 9, and '751 Patent claim 12 all recite a "synchronization code," which means they are claiming the alternate embodiment from the specification that requires user action to obtain the synchronization code. As additional support, Defendants point to the prosecution history of the '251 Patent, when the examiner and applicant "discussed claim amendments that

could overcome the prior art of record," and specifically the Schwartz reference. Defendants also cite an examiner amendment entered following an interview that added the "synchronization code" limitations before issuing a Notice of Allowability. (Dkt. 40-3 and 40-4.)

The Court first looks at independent claim 1 of the '251 Patent. The preamble sets forth that it is a "machine-implemented method" where a "server system" performs various steps of "assigning . . . a synchronization code to the display device," "receiving . . . a message from a personal computing device . . . wherein the message includes the synchronization code," and "storing . . . a record establishing an association between the personal computing device and the display device based on the synchronization code." None of the steps includes an act performed by the user. The claim language leaves open how the personal computing device obtains the synchronization code or how the server system receives the synchronization code from the personal computing device.

Claim 12 of the '751 Patent is similarly worded. It is a "computer-implemented method" where the "content presentation device" performs the actions of "obtaining" the synchronization code and "providing" it to a remote computing device. User action is not required. Like claim 1 of the '251 patent, there is no limitation on how the content presentation device provides the synchronization code to a remote computing device.

Turning to the specification, various embodiments are discussed, one of which is the embodiment Defendants rely upon: "the user can select the display device by entering a synchronization code uniquely associated with the particular display device." ('251 Patent, 5:14–16.) Also disclosed, however, are options that do not require user action at all, for example: "In some implementations, the content provider is allowed to add links to videos for that web site (i.e., mobile site or an application). The link facilitates synchronization to the secondary device 22 (e.g.,

a television set) and allows the end-user to load and control the video on the secondary device." (*Id.*, 9:28-33.) This is in addition to the disclosure that "[i]n some implementations, the user can select the display device from a list of devices displayed on the mobile phone 20. The list can include a field populated with names or identifications of display devices that previously have been initialized for connection," among other embodiments. (*Id.*, 5:10–14; *see also id.*, 5:21–23; 5:36–38.) Accordingly, the specification is not limited to the one embodiment identified by Defendants.

The prosecution history of the '251 Patent does not support Defendants' argument. Although the Notice of Allowability filed by the examiner added the first three elements of claim 1 to overcome the prior art, there was no reference to "a code which can be obtained by a user from the [display device / content presentation device] and provided by the user to the [personal computing device / remote computing device]" as Defendants advocate. If this was a crucial feature to distinguish the claim, the examiner would have included it. Nothing in the cited record requires user action to perform the claimed method. Indeed, Defendants' own proposed construction does not require user action as it is written permissively (*i.e.*, can be obtained by the user).

"[C]laims should not be limited 'to preferred embodiments or specific examples in the specification.'" *VLSI Tech. LLC v. Intel Corp.*, 53 F.4th 646, 652 (Fed. Cir. 2022). "[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 805 F.3d 1368, 1376 (Fed. Cir. 2015). In this case, the patent describes many embodiments, and Defendants seek to limit the claims to one. The Court declines to do so.

The Court does not believe the term to be ambiguous or confusing when read in the context of the full claim, the patent specification, and the prosecution history. A person of ordinary skill in the art would be able to understand that a synchronization code, as used in the claims, is a code used to synchronize or associate the display device and personal computing device that is communicated by the server system to the display device or the personal computing device, and back to the server system again.

The Court therefore finds **the term "synchronization code" should have its plain and ordinary meaning.**

4. Order of the method claim steps in the Patents-in-Suit

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning The terms are not chronologically limited under relevant case law, and the jury does not need instruction on ordering of claim steps, as any ordering requirements are reasonably clear from the claims themselves.	In the '751 Patent, all steps of claim 12 must occur in order. In the ''934 Patent, all steps of claim 17 must occur in order. In the '251 Patent, step 2.A ("checking") must occur after step 1.D ("receiving, in the server system, one or more signals")

Defendants contend the plain language of the claims require the steps to be performed in a certain order, as in their proposed construction. Plaintiff does not disagree, recognizing that the claims logically require some steps to be performed after others, but argues that an express instruction about the order of steps risks confusing the jury. In particular, Plaintiff points to how claim 12 of the '751 Patent, for example, contemplates a "second message" existing before the receiving of a "first message," even though the order of appearance has the "first message" being introduced before the "second message." Thus, Plaintiff suggests, an explicit instruction about the order of steps may be at odds with the structure of the claims.

"When analyzing whether an order exists between steps of a method claim, the presumption is that limitations may be performed in any order." *Datanet LLC v. Dropbox, Inc.*, 2023 WL 7545234, at *3 (W.D. Tex. Nov. 10, 2023) (citing *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003)). "Courts first look at the 'claim language to determine if, as a matter of logic or grammar, they must be performed in the order written' and, if not, whether the specification 'directly or implicitly requires such a narrow construction.'" *Id*.

Here, in most instances, the claim language establishes a certain order to the steps that proceed in a logical manner. In claim 12 of the '751 Patent, each step in the method references and builds upon the preceding step, thereby creating an obvious progression of the steps, as follows:

> 12. A computer-implemented method for remotely presenting various types of content, comprising:
>
> obtaining, by a content presentation device, a synchronization code associated with the content presentation device, wherein the associated synchronization code is stored on a remote server device;
>
> providing, by the content presentation device, the synchronization code to a remote computing device in communication with the remote server device, wherein the provided synchronization code causes the remote server device to store an association between the content presentation device and the remote computing device;
>
> receiving, by the content presentation device and from the remote server device, a first message that includes at least one command in a first format, the first message being received based at least in part on the stored association and on a second message including at least one command in a second format having been sent from the associated remote computing device;
>
> selecting, by the content presentation device while a connection between the content presentation device and the remote server device is maintained, a first media player application from a plurality of media player applications based at least in part on the first format of the first message, the first media player application being selected to play a first piece of content referenced in the received first message; and
>
> controlling, by the content presentation device, how the selected first media player application plays the referenced first piece of content based on a first command of the at least one command in the first format having been included in the received first message.

Plaintiff's concern about the first/second message being confused appears as an internal component of a step and is resolved by the language of that claim element. While a "first message" is introduced first, it explicitly states that the "first message [is] . . . based at least in part . . . on a second message . . . including at least one command in a second format having been sent from the associated remote computing device." Accordingly, the first message depends upon the existence of the second message, which is a necessary predicate.

Claim 17 of the '934 Patent is similarly worded in that each step in the method references and builds upon the preceding step, making the order apparent upon a plain reading, as shown:

> 17. A computer-implemented method for controlling playback of various types of content, comprising:
>
> providing, by a media receiver, a unique identifier of the media receiver to a computing device in communication with a server system;
>
> based on the provided unique identifier, receiving, by the media receiver via the server system, a set of messages from the computing device, the received set of messages referencing a piece of content associated with a first type of media playing application of a plurality of media playing application types, and including a set of commands converted from a universal format defined by the computing device to a first format that corresponds to the first type of media playing application;
>
> in response to receiving the set of messages, selecting, by the media receiver, the first type of media playing application from the plurality of media playing application types based at least in part on its association with the piece of content referenced in the received set of messages; and
>
> controlling, by the media receiver, how the selected first type of media playing application plays the referenced piece of content based on at least one command of the converted set of commands included in the received set of messages.

Turning to the '251 Patent, in claim 1 steps (a)-(c) refer to and build upon the preceding element, which shows that they must be performed in order, as shown:

> 1. A machine-implemented method of controlling presentation of video content on a display device that loads any one of a plurality of different media player players, the method comprising:

(a) assigning, by a server system, a synchronization code to the display device;

(b) receiving, in the server system, a message from a personal computing device that is separate from the server system and separate from the display device, wherein the message includes the synchronization code;

(c) storing, by the server system, a record establishing an association between the personal computing device and the display device based on the synchronization code;

(d) receiving, in the server system, one or more signals from the personal computing device, the one or more signals specifying a video file to be acted upon and identifying a particular media player for playing the video content, the one or more signals further including a universal playback control command for controlling playing of the video content on the display device by the particular media player,

(e) converting, by the server system, the universal playback control command into corresponding programming code to control playing of the video content on the display device by the particular media player, wherein converting the universal playback control command includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player; and

(f) storing, in a database associated with the server system, information for transmission to or retrieval by the display device, wherein the information specifies the video file to be acted upon, identifies the particular media player for playing the video content, and includes the corresponding programming code to control playing of the video content on the display device by the particular media player in accordance with the universal playback control command.

Steps 1(d)-(f) also reference and build upon the preceding steps so they must be performed in sequence. However, steps 1(d)-(f) can be performed at any time in relation to steps 1(a)-(c).

Claim 2 of the ’251 Patent reads as follows:

2. The method of claim 1 including:

(a) checking, in the server system, the identity of the media player identified in the one or more signals from the personal computing device;

(b) loading an appropriate set of protocols or application programming interfaces from a library based on the identity of the media player; and

(c) converting the command from the personal computing device into corresponding code to control the media player.

The "checking" step of claim 2(a) necessarily occurs after the "receiving" step of claim 1(d) because it references and builds upon the "one or more signals" previously received in step 1(d).

Accordingly, the Court agrees with Defendants that their submitted order to the steps of the relevant claims is correct. Nor has Plaintiff made an argument against this ordering. Yet, as above, the Court is disinclined to make an advisory ruling when there appears to be no genuine dispute as to the meaning or scope of the claim terms. The parties have not approached the Court with a dispute that needs to be resolved. But for Defendants' request for an instruction to the jury, there is no real disagreement over the ordering of the claim steps. Indeed, both sides seem to agree that the logical structure of the claim language provides for an order to the steps. And, as illustrated above, a simple reading of the claims clearly shows the relationship between the claim elements that impose an order to the steps. Defendants simply ask the Court to emphasize to the jury the order that is already plainly laid out in the claims. The Court declines to do so.

The Court therefore finds that **the order of the method steps in the Patents-in-Suit should be given their plain and ordinary meaning.**

5. "storing…based on the synchronization code"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"storing…based on the synchronization code" ('251 Patent, claim 1)	Plain and ordinary meaning	Based on the synchronization code, storing.

The issue to be resolved is what "based on a synchronization code" modifies: "storing" or "an association." The disputed term appears in claim 1 of the '251 Patent and reads as follows:

> storing, by the server system, a record establishing an association between the personal computing device and the display device based on the synchronization code;

Plaintiff argues that the relative phrase "based on the synchronization code" describes the immediately preceding object: "an association between the personal computing device and the display device." Thus, according to Plaintiff, the server system is storing a record establishing an association, wherein the association—not the storing—is based on the synchronization code.

Defendants disagree, contending that it is not clear what "based on the synchronization code" modifies and so it needs construction. Defendants say that while the relevant phrase could modify "association," it could also equally mean that the "storing" of that association is based on the synchronization code. Defendants cite to various portions of the specification to show that the association is stored based on the receipt of the synchronization code, and they argue that there is no disclosure of any association between the mobile and display devices based on the synchronization code. Defendants point to the lookup table in FIG. 4, which stores a correspondence between a mobile phone and a tv without showing the synchronization code, as confirmation that the "association" is not based on the synchronization code.

Claim 1 of the '251 Patent recites in relevant part:

> assigning . . . a synchronization code to the display device;
>
> receiving . . . a message from a personal computing device . . . wherein the message includes the synchronization code;
>
> storing . . . a record establishing an association between the personal computing device and the display device based on the synchronization code;

A plain reading of the claim language's structure and the cadence of the elements suggests that the act of "storing" is of "a record" and the record is of "an association between the personal computing device and the display device" and it is the association that is "based on the synchronization code." There is a logical order to these steps that begins in the preceding claim element where a message is first received "from a personal computing device . . . wherein the message includes the synchronization code." Only once the message is received can an association

be established, and only then can the record of that association be stored. The stored record, therefore, establishes an association between the personal computing device and the display device that is based on the synchronization code. It is precisely this association, which is based on the synchronization code, that allows the ensuing steps of playback communication to take place.

This interpretation further makes sense grammatically because "based on a synchronization code" falls at the end of the sentence and modifies the immediately preceding object, which is the "association between the personal computing device and the display device." *See Kruse Tech. P'ship v. Volkswagen AG*, 544 F. App'x 943, 949 (Fed. Cir. 2013) ("[a] claim must be read in accordance with the precepts of English grammar") (internal quotation and citation omitted). Defendants' rewording of the claim term is strained and inconsistent within the context of the full claim. The Court does not find that the claim language contains any ambiguity about which phrase the disputed term modifies.

The specification is consistent with this plain reading. In each instance of the specification as cited by the parties, receipt of the synchronization code precedes storing information about the connection between the mobile phone and display device in the look-up table, in the order as recited in claim 1: "Once the synchronization code is entered into, or captured by, the mobile phone 20, it is sent from the mobile phone 20 to the server system 24, which stores the information in the look-up table 36 so as to establish a connection between the mobile phone 20 and the display device 22 through the server system 24." ('251 Patent, 5:36–41.) The purpose of the synchronization code is to synchronize the mobile phone with the display device in the server system, and this association is stored in a lookup table like the one in FIG. 4. (*Id.* at 5:36-41.) That does not mean the lookup table must also store the synchronization code itself once the association upon which it is based is stored. Thus, the absence of a column showing the synchronization code

in FIG. 4 does not help to make Defendants' point. The Court is not persuaded by Defendants' evidence that this phrase is ambiguous or unclear in the context of the entire claim and patent specification.

The Court therefore finds that **"storing . . . based on the synchronization code" should be given its plain and ordinary meaning.**

6. "first format"/ "second format"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"first format" / "second format" ('751 Patent, claims 12, 16)	Plain and ordinary meaning	Second format is different from the first format

These terms appear in independent claim 12 of the '751 Patent, with the relevant element reading as follows:

> receiving, by the content presentation device and from the remote server device, a first message that includes at least one command in a **first format**, the first message being received based at least in part on the stored association and on a second message including at least one command in a **second format** having been sent from the associated remote computing device;

The issue to be resolved is, even if the "first format" and "second format" must be different formats, whether the content of the commands in those formats may be the same.

Plaintiff does not dispute that the "first format" and "second format" are different formats. Plaintiff agrees that the plain language of the claim in choosing to use different words makes it apparent that the formats are not the same. However, Plaintiff argues, the two instances of a command may be the same expression in two separate formats. Plaintiff points to FIG. 5 as illustrative in that it shows a "Universal Command" in a first format and a "Specific Player Command" in a second format, as follows:

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Universal API Adapter		
Universal Command	MediaPlayerID	Specific Player Command
New Video	YouTube	yt_loadVideo
	Ted.com	getVideo
	Vimeo	loadNewVideo
Pause	YouTube	yt_pauseVideo
	Ted.com	pauseVideo
	Vimeo	pause

FIG. 5

Plaintiff emphasizes that while the content of some commands do change between the first format and second format, such as "Pause" to "yt_pauseVideo" for the YouTube media player, the command "pause" remains substantively the same for other media players like Vimeo. Plaintiff finds additional support in the specification that explains that the command only needs to be converted "if the command received from the personal computing device is not recognizable by the media player," so if the command is already recognizable by the media player, then conversion does not require a change. ('251 Patent, 2:3-7.)

Defendants disagree, essentially arguing that Plaintiff is drawing a distinction without a difference. Defendants submit that during prosecution of the '751 Patent, the applicant explicitly distinguished the invention over the Morris prior art reference by pointing out that the formats in Morris were not different. (*See* Dkt. 40-5 at 11, arguing that Morris did not disclose the relevant claim step because "Morris never describes commands in different formats."). Thus, per Defendants, the applicant made a clear and unmistakable disclaimer of claim scope in overcoming the Morris prior art. Moreover, Defendants argue that the specification explains that "terms such as 'first,' 'second,' etc." are "labels to distinguish the various messages from one another," so they must be different. ('251 Patent, 9:34–36.) Defendants also point to claims 5, 6, and 16 of the '751

Patent that all recite converting "the at least one command in the second format into the at least one command in the first format," to support its position that the two formats cannot be the same because, if they were, then no conversion would be necessary or possible.

As a threshold matter, the Court notes that Defendants' arguments are focused on the first and second formats being different, which is not an issue in dispute. Plaintiff already agrees that the formats must be different and makes no argument against the prosecution history disclaimer or the wording of the claims. The dispute is over how Plaintiff draws a distinction between the "format" and the "content" of the commands, arguing that while the format must be different, the content does not have to be.

First, the Court notes that the word "content" does not appear in the claims as used in reference to the commands. Claim 12 simply recites "a first message that includes at least one command in a first format" and "a second message including at least one command in a second format." Thus, the command must be the content of the message, and the command must be in different formats.

Turning to the specification, FIG. 3, below, shows "a transmission code from the mobile phone 20 to the server system 24." ('251 Patent, 4:35-37).

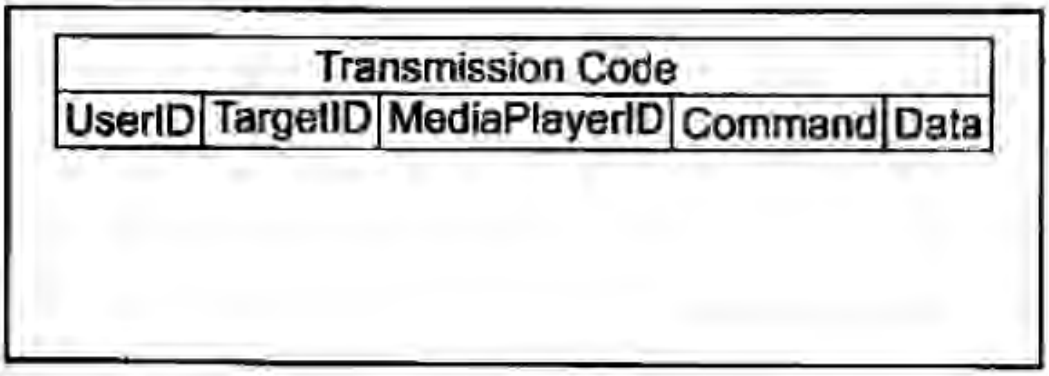

FIG. 3

The transmission code appears to be the message and includes a command that "contains a JavaScript reference to control the media player needed to play the selected video." (*Id.* at 5:54-57.) On the one hand, "[v]arious types of video players ***may use different Java Script commands*** to control their respective playback. Therefore, in the illustrated implementation, a universal adapter 26 adapter is provided to interpret and convert a standard or universal command (e.g., play, pause, etc.) into the specific command recognized by the media player." (*Id*. at 5:57-62) (emphasis added). On the other hand, the media players may use the same format of commands and not require conversion. (*See id.* at 2:3-7, "The server system is operable, in response to receiving the message, to convert the command into a corresponding command recognizable by the media player ***if the command received from the personal computing device is not recognizable by the media player***" (emphasis added).) Although the specification describes both the instance when the commands are not recognizable and require conversion as well as the instance when the commands are recognizable and do not need conversion, claim 12 of the '751 Patent appears to only cover the former.

This is further supported by the lookup table in FIG. 5, above, which acts as the dictionary to convert commands from one format to another. It shows where the Universal Command is different from the Specific Player Command depending on the media player used, so a conversion can take place to convert the command from a first format to a second format. If the commands are the same, *e.g.* "pause," which is recognizable by the chosen media player, then conversion would not be required. In this way, FIG. 5, along with the earlier disclosure in column 2 of the specification, shows two different embodiments of the invention, only one of which is claimed by claim 12. Other claims of the '751 Patent that are not before the Court may cover the alternate embodiment.

The Court notes that the parties dispute whether the differences in capitalization of "Pause" and "pause" are differences in format. Without any evidence as to the distinction or lack thereof, the Court takes no position on the matter, but states that the conclusion is nonetheless consistent. The point is that if the formats are different (by capitalization or otherwise), then claim 12 applies. And if the formats are not different, then claim 12 does not.

The Court further notes that in each of the examples in FIG. 5, the format of the command and the content of the command are inseparable from each other. There is no further "content" besides the format. The action that these commands produce (the act of pausing) is consistent across conversions because that is the point—for the same action to be performed across different media players. As a result, Plaintiff's argument for considering content over format is a distinction without a difference.

The Court is persuaded that "a second format" must be different from "a first format." The distinction is clear from the choice of words and the overall claim language read in context of the specification. Accordingly, an explicit construction is not required.

The Court therefore finds that **"first format" and "second format" should be given their plain and ordinary meanings.**

7. "the first format of the first message"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"the first format of the first message" ('751 Patent, claim 12)	Plain and ordinary meaning	Indefinite

The issue is whether the claim is indefinite for a lack of proper antecedent basis. The relevant portions of claim 12 of the '751 Patent read as follows:

> (c) receiving . . . **a first message that includes at least one command in a first format** . . . ;
>
> (d) selecting . . . a first media player application from a plurality of media player applications based at least in part on **the first format of the first message**, . . . ; and
>
> (e) controlling . . . how the selected first media player application plays the referenced first piece of content based on a first command **of the at least one command in the first format** having been included in the received first message.

The parties disagree on whether it is unclear what "the first format" refers to, whether it is "a first message" or "at least one command."

Plaintiff's position is that there is no confusion because "the first format" refers to both "a first message" and "at least one command." Plaintiff points out that the claim specifically requires the command to be included in the first message: "a first message that includes at least one command in a first format." The language is not inconsistent, according to Plaintiff, because as the "command" is in the message, the format of the command is also the format "of the message."

Defendants disagree and submit that the antecedent basis is not clear. The first appearance of "a first format" is in step 12(c). Then, step 12(d) refers to "the first format of the first message," whereas step 12(e) refers to "the at least one command in the first format." So, Defendants contend it is unclear whether in step 12(c), "in a first format" modifies "a first message" or "at least one command," and as a result, one of them will lack antecedent basis. In response to Plaintiff's argument about the command being in the message, Defendants argue that both the claims and the specification confirm that messages and commands are not the same, so the format of one is not the same as the format of the other.

Looking at claim 12, the claimed "message" and "command" are distinct limitations with different meanings and scope. The use of different words aligns with the "general presumption that different terms have different meanings." *Chicago Bd. Options Exch., Inc. v. Int'l Sec. Exch.,*

LLC, 677 F.3d 1361, 1369 (Fed. Cir. 2012) (citations omitted). In addition, the claim recites that the "message includ[es] at least one command," therefore, the message is inclusive of the command but not vice versa. As for whether "in a first format" modifies the "message" or the "at least one command," a plain reading of the claim language has "in a first format" modifying the closest object, which is the "at least one command." Taking step 12(c) in isolation, it would be a strained reading to argue that "in a first format" modifies the "message." Indeed, Defendants only suggest that it could because step 12(e) explicitly refers to "the first format of the first message."

But it is the case that both "the first format of the first message" in step 12(d) and "the at least one command in the first format" in step 12(e) refer back to the prior recitation of "first format" from step 12(c), and this must be reconcilable in order to find antecedent basis. The only way both limitations can be in "the first format" is if the first format modifies both the message and the command.

The specification is consistent with the claim in disclosing that a "message can include a command." ('251 Patent, 2:1-3.) FIG. 3 is shown as "[a]n example of the format of a transmission code from the mobile phone 20 to the server system 24," (*id.* at 4:35-37) and includes the "command." Accordingly, the format of the command is an integral part of the message. In addition, step 12(d) provides for "selecting . . . a first media player application from a plurality of media player applications based at least in part on the first format of the first message . . . ." The specification describes: "[T]he command in the transmission code (see FIG. 3) contains a JavaScript reference to control the media player needed to play the selected video. Various types of video players may use different Java Script commands to control their respective playback . . . . Each time a signal is received from the mobile device 20, the API adapter 26 checks and identifies the specific media player that is being requested." (*Id.* at 5:54-64.) So, the invention

is about looking to the format of the command in the transmission code to determine which media player is required. A reasonable reading of the claim in light of the specification, therefore, reveals that "the first format" must be describing the command within the message rather than the message itself.

In particular, step 12(d) is for "selecting . . . a first media player application from a plurality of media player applications based at least in part on the first format of the first message." As explained in the specification, this determination of which media player to use is made by looking at the part of the message that shows the Java Script of the command. Accordingly, the Court finds that "in a first format" modifies both the "at least one command" and the "first message" at least as to the portion of the message that is the command.

The definiteness inquiry "focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification." *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir. 2001). Although the Court may not rewrite the claim to correct material errors, "the issue here is not correction of error, but understanding of what the claim covers. When the meaning of the claim would reasonably be understood by persons of ordinary skill when read in light of the specification, the claim is not subject to invalidity upon departure from the protocol of 'antecedent basis.'" *Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006). "A claim that is amenable to construction is not invalid on the ground of indefiniteness." *Id.* A claim is not indefinite merely because it poses a difficult issue of claim construction. The Federal Circuit has stated that "[i]f the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Exxon Research & Eng'g Co. v. United States*, 265

F.3d 1371, 1375 (Fed. Cir. 2001). Here, Defendants have not met the high burden to show that one of skill in the art would not be able to reasonably determine what is meant by this claim phrase. Instead, the meaning of this claim term is easily ascertainable from the context of the specification.

The Court therefore finds that the term **"the first format of the first message" is not indefinite.**

8. "a unique identifier" / "the unique identifier"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"a unique identifier" / "the unique identifier" ('934 Patent, claim 17)	Plain and ordinary meaning	Must be the same "unique identifier" throughout the claim.

The dispute over this term is the same as in claim Term #2, *supra*, in that Defendants seek an explicit instruction that both "a unique identifier" and "the unique identifier" must refer to the same unique identifier according to their antecedent basis relationship. Based on the reasoning laid out in Term #2, the Court arrives at the same conclusion in finding that there is no dispute between the parties that antecedent basis applies, thus no further construction is necessary.

The Court therefore finds **"a unique identifier" and "the unique identifier" to have their plain and ordinary meanings.**

9. "unique identifier"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"unique identifier" ('934 Patent, claim 17)	Plain and ordinary meaning	"an identifier which can be obtained by a user from the media receiver and provided by the user to the computing device"

The issue here is whether a user must be the one obtaining the unique identifier and providing it to the computing device. The Parties agree that this claim term should be treated similarly to Term #3 "synchronization code," *supra*. The Court finds the reasoning and conclusion discussed above applies equally here.

The only reference to "unique identifier" in the '934 Patent is in its Abstract:

> A system for controlling playback of various types of content includes a first computing device that provides a ***unique identifier*** to a second computing device to establish an association there between. By virtue of the established association, the second computing device can send one or more messages to the first computing device, the one or more messages referencing a piece of content associated with a first media playing element of a plurality of media playing elements, and one or more commands corresponding to the first media playing element.

Claim 17 of the '934 Patent recites "[a] computer-implemented method" comprising the steps of "providing, by a media receiver, a unique identifier of the media receiver to a computing device in communication with a server system" and then, "based on the provided unique identifier, receiving, by the media receiver via the server system, a set of messages from the computing device . . . ." Thus, the function of the "unique identifier" appears to be essentially the same as the "synchronization code" in the '251 and '751 Patents. Similarly, claim 17 of the '934 Patent do not mention or suggest user involvement. Rather, it is the "media receiver" that provides the unique identifier to a computing device with no required or identified intermediary. Accordingly, the Court declines to accept Defendants' proposed construction. There is no support to import into the claim language a limitation requiring the unique identifier to be obtained or provided by a user.

The Court therefore finds **the term "unique identifier" should have its plain and ordinary meaning.**

10. "first format" / "universal format"

Claim Phrase	Plaintiff's Construction	Defendants' Construction
"first format" / "universal format" ('934 Patent, claim 17)	Plain and ordinary meaning	Universal format is different from the first format.

The dispute regarding this claim term is similar to Term #6 "first format" / "second format," *supra*, in that the issue is whether the two formats must be different from one another. The reasoning and conclusion for Term #6 also applies here.

These terms appear in independent claim 17 of the '934 Patent, with the relevant element reading as follows:

> based on the provided unique identifier, receiving, by the media receiver via the server system, a set of messages from the computing device, the received set of messages referencing a piece of content associated with a first type of media playing application of a plurality of media playing application types, and including a set of commands ***converted from a universal format*** defined by the computing device ***to a first format*** that corresponds to the first type of media playing application;

The terms again appear in dependent claim 19, which reads as follows:

> The method of claim 17, wherein the server system is configured to ***convert the set of commands from the universal format to the first format*** based on the piece of content being associated with the first type of media playing application.

In both instances, the claim language requires a conversion to take place that changes the commands from a universal format to a first format, which means that these must be two different formats. Thus, the Court is persuaded that "universal format" is different from "first format" and the distinction is clear from the choice of words and the overall claim language read in context of the specification. Accordingly, an explicit construction is not required.

The Court therefore finds that **"first format" and "universal format" should be given their plain and ordinary meanings.**

V. CONCLUSION

The Court adopts the constructions as set forth in this opinion for the disputed terms of the Patents-in-Suit.

The parties are **ORDERED** that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are **ORDERED** to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

So ORDERED and SIGNED this 9th day of July, 2024.

RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE