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

PERSONALIZED MEDIA	§	
COMMUNICATIONS, LLC	§	
	§	
v.	§	CASE NO. 2:17-CV-433-JRG
	§	
TCL CORP., et al.	§	

**CLAIM CONSTRUCTION
MEMORANDUM AND ORDER**

Before the Court is the Opening Claim Construction Brief (Dkt. No. 54) filed by Plaintiff

Personalized Media Communications, LLC ("Plaintiff" or "PMC"). Also before the Court are

Defendants TCL Corp. and TCL Multimedia Technology Holdings Ltd.'s ("Defendants' or

"TCL's") Responsive Claim Construction Brief (Dkt. No. 57) and Plaintiffs' reply (Dkt. No. 58).

The Court granted the parties' request that these claim construction proceedings be

conducted without an oral hearing. (See Dkt. Nos. 62 & 64.)

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I. BACKGROUND

Plaintiff brings suit alleging infringement of United States Patents No. 7,747,217 ("the '217 Patent"), 7,752,649 ("the '2649 Patent"), 7,752,650 ("the '650 Patent"), 7,856,649 ("the '6649 Patent"), 8,675,775 ("the '775 Patent"), and 8,711,885 ("the '885 Patent") (collectively, "the patents-in-suit"). (See Dkt. No. 1, Exs. 1–6.)

The '217 Patent, titled "Signal Processing Apparatus and Methods," issued on June 29, 2010, and bears an earliest priority date of November 3, 1981. The Abstract of the '217 Patent states:

> A unified system of programming communication. The system encompasses the prior art (television, radio, broadcast hardcopy, computer communications, etc.) and new user specific mass media. Within the unified system, parallel processing computer systems, each having an input (e.g., 77) controlling a plurality of computers (e.g., 205), generate and output user information at receiver stations. Under broadcast control, local computers (73, 205), combine user information selectively into prior art communications to exhibit personalized mass media programming at video monitors (202), speakers (263), printers (221), etc. At intermediate transmission stations (e.g., cable television stations), signals in network broadcasts and from local inputs (74, 77, 97, 98) cause control processors (71) and computers (73) to selectively automate connection and operation of receivers (53), recorder/players (76), computers (73), generators (82), strippers (81), etc. At receiver stations, signals in received transmissions and from local inputs (225, 218, 22) cause control processors (200) and computers (205) to automate connection and operation of converters (201), tuners (215), decryptors (224), recorder/players (217), computers (205), furnaces (206), etc. Processors (71, 200) meter and monitor availability and usage of programming.

Plaintiff submits that "[a]ll six patents have the identical specification" (Dkt. No. 54, at 1), so the Court herein refers to the specification of only the '217 Patent unless otherwise indicated.

Plaintiff has asserted the following claims of the patents-in-suit (Dkt. No. 46, at 1):

Patent	Claims
7,747,217	1, 2, 3, 4, 5, 7, 9, 11, 30, 31, 32, 38

7,752,649	1, 2, 3, 7, 8, 11, 12, 13, 22, 23, 24, 26, 27, 28, 29, 39, 40, 41, 42, 45, 48, 49, 50, 51, 62, 63, 64, 67, 78, 79, 80, 81, 82, 83, 84, 88, 89, 90, 91, 92, 93, 94, 97, 98
7,752,650	1, 2, 3, 4, 9, 18, 32, 33
7,856,649	9, 10
8,675,775	2, 3, 4, 5, 6, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23
8,711,885	1, 9, 10, 11, 12, 13, 14, 15, 17, 21, 23, 26, 27, 100, 102, 103, 105, 106

The Court previously construed terms in the patents-in-suit in Personalized Media Communications, LLC v. Apple, Inc., et. al., No. 2:15-cv-01366, Dkt. No. 246 ("Phase 1"), Dkt. No. 247 ("Phase 2") (E.D. Tex. Oct. 25, 2016).

II. LEGAL PRINCIPLES

It is understood that "[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." Burke, Inc. v. Bruno Indep. Living Aids, Inc., 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. Markman v. Westview Instruments, Inc., 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

"In some cases, however, 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 Pharms. 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).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. Markman, 52 F.3d 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).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita* Elec. Corp., 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). 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). 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).

This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in Phillips v. AWH Corporation, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In Phillips, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the

patentee is entitled the right to exclude." Id. at 1312 (quoting Innova/Pure Water, Inc. v. Safari

Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used

in a claim are generally given their ordinary and customary meaning. Id. The 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." Id. at 1313. This principle of patent law flows naturally from the

recognition that inventors are usually persons who are skilled in the field of the invention and

that patents are addressed to, and intended to be read by, others skilled in the particular art. Id.

Despite the importance of claim terms, Phillips made clear that "the 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. Although the claims themselves may provide guidance as to the meaning of

particular terms, those terms are part of "a fully integrated written instrument." Id. at 1315

(quoting Markman, 52 F.3d at 978). Thus, the Phillips court emphasized the specification as

being the primary basis for construing the claims. Id. at 1314–17. 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). In

addressing the role of the specification, the Phillips court quoted with approval its earlier

observations from Renishaw PLC v. M*arposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir.

1998):

> Ultimately, the interpretation to be given a term can only be determined and
> confirmed with a full understanding of what the inventors actually invented and
> intended to envelop with the claim. The construction that stays true to the claim

language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, Phillips emphasized the important role the specification plays in the claim construction process.

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. Id. 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").

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The en banc court condemned the suggestion made by Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. Phillips, 415 F.3d at 1319–24. According to Phillips, reliance on dictionary definitions 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.

Phillips emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. Id.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. Id. at 1323–25. Rather, Phillips held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

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., 134 S. Ct. 2120, 2129 (2014). "A determination of claim indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), abrogated on other grounds by Nautilus, 134 S. Ct. 2120.

In general, prior claim construction proceedings involving the same patents-in-suit are "entitled to reasoned deference under the broad principals of stare decisis and the goals articulated by the Supreme Court in Markman, even though stare decisis may not be applicable per se." Maurice Mitchell Innovations, LP v. Intel Corp., No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006) (Davis, J.); see TQP Development, LLC v. Intuit Inc., No. 2:12-CV-180, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J., sitting by designation)

("[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so."); see also Teva, 135 S. Ct. at 839–40 ("prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority") (citation omitted); Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1329 (Fed. Cir. 2008) (noting "the importance of uniformity in the treatment of a given patent") (quoting Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996)).

III. AGREED TERMS

In their April 6, 2018 Joint Claim Construction and Prehearing Statement (Dkt. No. 46, Ex. A, at 1), as well as in their June 15, 2018 Joint Claim Construction Chart Pursuant to P.R. 4-5(d) (Dkt. No. 59-1), the parties set forth agreements as to the following terms in the patents-in-suit:

Term	Agreement
an expanded [and contracted] code portion ('775 Patent)	Larger [and smaller] code portion.
cadence information ('775 Patent)	Information (such as headers, length tokens, or end of file signals) that enables a receiver apparatus to distinguish the individual messages of a message stream.
code ('650 and '775 Patents)	One or more instructions.
code portion ('775 Patent)	Part of an instruction set.
control processor ('2649, '650, and '885 Patents)	A processor that controls other devices or circuitry by processing control information.
control signal ('6649, '775, and '885 Patents)	A signal that controls.

digital television signals ('2649, '6649, and '650 Patents)	Television programming in which the video and audio are transmitted as digital video signals and digital audio signals, at least a portion designed for multiple recipients.
digital video signals ('2649 and '650 Patents)	Video signals encoded as discrete numerical values instead of an analog representation.
embedded data [on said information transmission] ('885 Patent)	Data that is enclosed within or made an integral part of said information transmission.
embedded signal[s] ('885 Patent)	Signals that are enclosed within or made an integral part of a transmission.
instruct signals ('6649 Patent)	Signals carrying information that instructs an operation to be invoked.
message ('2649 Patent)	All the signal processing information, transmitted in a given transmission, from the first bit of one header to the last bit transmitted before the first bit of the next header.
message stream ('2649 and '650 Patents)	A series of messages.
processor (all patents-in-suit)	A device that performs operations according to instructions.
programmable [control] processor[s] ('885 Patent)	[Control] processors that can be provided with a sequence of operating instructions.
programming ('2649, '650, '6649, '775, and '885 Patents)	[noun] Everything that is transmitted electronically to entertain, instruct, or inform, including television, radio, broadcast, print, and computer programming as well as combined medium programming.

[verb] Providing a sequence of operating instructions. |
| portion receiver ('775 Patent) | Device or component that receives the code portion. |
| processor instruction[s] ('217 and '775 Patents) | Commands or signals that are executed by, or instruct, a processor to perform operations. |

variable formats ('6649 Patent)	Formats that can be changed or adapted.
varying locations ('6649 Patent)	Changes in the place where a television programming signal can be found within a transmission.
varying timing lengths ('6649 Patent)	Changing amount of time required to transmit information.
valve ('885 Patent)	A device or processor that regulates the flow of signals.
valve control signals ('885 Patent)	Signals that control the operation of a valve.
Preamble of claim 9 of the '6649 patent	The preamble is limiting because it provides the antecedent basis for the term "said programmable receiver station" in claim 9.
Preamble of claim 1 of the '885 patent	The preamble is limiting because it provides the antecedent basis for the terms "said valve" and "said at least one processor" in claim 1.
Preamble of claim 9 of the '885 patent	The preamble is limiting because it provides the antecedent basis for the terms "said receiver station," "said plurality of sources," "said first processor" and "said second processor" in claim 9.
Preamble of claim 105 of the '885 patent	The preamble is limiting because it provides the antecedent basis for the terms "said plurality of programmable processors" and "said stream of digital data messages" in claim 105.

IV. DISPUTED TERMS

A. "register memory"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Memory to temporarily store information for use in later operations.	A memory in a processor to temporarily store information for use in later operations.

(Dkt. No. 46, Ex. B, at 1; Dkt. No. 54, at 1; Dkt. No. 57, at 6; Dkt. No. 59-1, at 32.) The parties

submit that this term appears in claims of the '2649 and '885 Patents. (Dkt. No. 46, Ex. B, at 1.)

Plaintiff cites the Court's analysis in Phase 1 and argues that "[t]here is no basis to depart from the Court's prior constructions of the term." (Dkt. No. 54, at 1–2.)

Defendants respond that the claims themselves "indicate[] that the register memory is in a processor because the functionality recited in the asserted claims requires information contained in the local register memory to be passed through and processed by the claimed processors." (Dkt. No. 57, at 6.)

Plaintiff replies by reiterating that the Court has analyzed these issues previously, and "TCL cannot urge a different result here, where the claims at issue (2'649 patent, claims 39, 62, and 67) are identical to those the Court construed previously." (Dkt. No. 58, at 1 n.1.) Plaintiff argues that "[t]he fact that a 'message stream' is input to a 'control processor' and certain 'control information' in that message stream is ultimately communicated to a 'register memory' from a processor in no way suggests, much less requires, that the register memory be within the processor." (Id., at 1–2.)

(2) Analysis

Claim 39 of the '2649 Patent, for example, recites:

39. A method of processing signals in a television receiver, said television receiver having a plurality of processors, said method comprising the steps of:
     receiving an information transmission including digital television signals and a message stream;
     detecting said message stream in said information transmission;
     inputting at least a first portion of said message stream to a control processor;
     selecting control information in said at least a first portion of said message stream and communicating said selected control information to at least one register memory;
     comparing stored function invoking data to the contents of said at least one register memory;
     inputting said digital television signals to said plurality of processors on the basis of one or more matches;

processing of said digital television signals simultaneously at two or more of said plurality of processors; and displaying television programming included in said digital television signals.

Defendants have not shown how the recitals of a "control processor" and selecting and communicating control information necessarily require the "register memory" to be "in a processor." Likewise, Defendants have not shown that the specification compels a narrow reading. See '217 Patent at 83:24-27 ("With the exception of the memories whose names include the word 'working,' all of the aforementioned register memories are dedicated strictly to the functions described below and are not used for any other functions.").

Disclosure of processors having register memories does not demonstrate that all register memories must be in a processor, and Defendants have not identified any definition or disclaimer in this regard. See '217 Patent at 19:46–20:3, 20:26–33, 35:47–36:3 ("Said capacity includes standard register memory or RAM capacity . . . ."), 49:29–32 & 54:61–64. In short, Defendants have not justified departing from the Court's construction in Phase 1, in which the Court addressed Claims 39, 62, and 67 of the '2649 Patent as follows:

> Though the passage cited by Defendants may contrast "register memory" from "RAM," it does not do so on the basis of whether or not the memory is in a processor or not. Moreover, the passage indicates that register memory may be found not just in processors but also in comparators or buffers. '091 Patent 35:34–43. There is no disavowal limiting the ordinary meaning of "register memory" to only processors. Similarly, the claims do not make such a requirement. Defendants are correct that the specification elsewhere provides processors that have register memories, however, these are not statements limiting register memories to processors and the mere inclusion of an embodiment in the specification does not mandate reading that embodiment into the claims. Arlington, 632 F.3d at 1254.

> The Court construes "register memory" to mean "memory to temporarily store information for use in later operations."

Phase 1 at 76–77 (emphasis omitted).

The extrinsic dictionary definition submitted by Defendants does not compel otherwise. Dkt. No. 57, Ex. A, *Webster's New World Dictionary of Computer Terms* 317 (3d ed. 1988) (defining "register" as: "A high-speed device used in a central processing unit for temporary storage of small amounts of data or intermittent results during processing"); see Phillips, 415 F.3d at 1321 ("heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification").

The Court therefore hereby construes **"register memory"** to mean **"memory to temporarily store information for use in later operations."**

B. "stored function invoking data"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Stored data that invokes a function.	Indefinite

(Dkt. No. 46, Ex. B, at 2; Dkt. No. 54, at 2; Dkt. No. 57, at 8; Dkt. No. 59-1, at 35.) The parties submit that this term appears in claims of the '2649 Patent. (Dkt. No. 46, Ex. B, at 2.)

<u>(1) The Parties' Positions</u>

Plaintiff submits that the Court has previously rejected an indefiniteness challenge, and Plaintiff proposes the construction that the Court previously reached. (Dkt. No. 54, at 2.) Plaintiff cites various disclosures in the specification and argues that "[t]here is no basis to depart from the Court's prior construction of the term." (Id. (citing '217 Patent at 12:4–13:4, 23:33–57, 33:33–43:36, 49:10–31, 49:38–56, 51:64–52:20, 143:60–144:10, 145:23–40, 241:27–242:14, 243:15–23, 243:37–244:24, 268:54–269:23 & Figs. 2E–2K).)

Defendants respond that this term is unclear because "'stored function invoking data' could either mean 'data for invoking a stored function' or 'stored data for invoking a function.'" (Dkt. No. 57, at 9.)

Plaintiff replies that the Court has already previously construed this term, and "[t]he standard for indefiniteness is not whether an alternative reading divorced from the claim language can be gleaned." (Dkt. No. 58, at 2.)

(2) Analysis

Defendants submit that, where multiple approaches exist, "the patent and prosecution history must disclos[e] a single known approach or establish that, where multiple known approaches exist, a person having ordinary skill in the art would know which approach to select." Dow Chem. Co. v. Nova Chems. Corp., 803 F.3d 620, 630 (Fed. Cir. 2015); see Teva Pharms. USA, Inc. v. Sandoz, Inc., 789 F.3d 1335, 1344–45 (Fed. Cir. 2015) (finding indefiniteness because neither the claims nor the specification indicated which of three possible measures to use in ascertaining "average molecular weight").

In Phase 1, the Court rejected an indefiniteness argument that was based on purported lack of certainty as between multiple meanings:

> Defendants propose three alternative readings of the claim term. However, Defendants view the claim term in isolation without consulting the surrounding claim language. The surrounding claim language provides guidance as to the meaning of the claim term. For example, in '2,649 claim 39 control information is provided to a register memory. The claim then calls out "comparing stored function invoking data to the contents of said at least one register memory." In this context, it is clear that the "data" is compared to the register memory. This also conforms to the specification. '091 Patent 143:66-144:10.[fn] As it is the data that is compared, the claim language is, thus, indicative that the intervening "stored function invoking" language modifies the claimed "data" that is compared. This again conforms to the specification. The data is stored and invokes a function. Again, this matches the specification which describes a station being "preprogrammed with station specific controlled-function-invoking information" and "preprogrammed invoking information of said stations." Id. In

this context, the preprogrammed information is the stored data. In context of the claim language and corresponding specification disclosure, the term is reasonable certainty [sic]. See Nautilus, 134 S. Ct. at 2129–30.

The Court construes "stored function invoking data" to mean "stored data that invokes a function."

[fn:] Similarly, '2,649 claim 54 recites "compare said control information to a stored function invoking datum, . . ." and '2,649 claim 62 recites "comparing stored function invoking data to the contents of said at least one register memory."

Phase 1 at 80–81 (emphasis omitted).

Here, Defendants urge that what is "stored" in this disputed term could be the "function" rather than the "data." See, e.g., '217 Patent at 12:65–67, 25:1–6 & 52:15–19 ("preprogrammed load-run-and-code instructions that control the loading of particular binary information"). On balance, however, Defendants have not justified departing from the Court's analysis and construction in Phase 1 as set forth above.

The Court therefore hereby construes **"stored function invoking data"** to mean **"stored data that invokes a function."**

C. "media" and "medium"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Forms of electronically transmitted programming, such as audio, video, graphics, text, and/or computer presentations.[1]	Forms of electronically transmitted programming, such as audio, video, graphics, and/or text, television programing (including its video and audio components) is a single form of media[2]

[1] Plaintiff previously proposed: "Forms of electronically transmitted programming, such as audio, video, text, computer graphics, and/or computer presentations." (Dkt. No. 46, Ex. B, at 4 (emphasis added).)

[2] Defendants previously proposed: "Channels of communication, such as radio, television, broadcast print, or Internet / channel of communication, such as radio, television, broadcast print, or Internet." (Dkt. No. 46, Ex. B, at 4 (emphasis added).) Plaintiff has pointed to Defendants' previous proposal of "Internet" as support for Plaintiff's proposal of "computer presentations" (Dkt. No. 58, at 3), but even assuming for the sake of argument that Defendants' prior proposal

(Dkt. No. 46, Ex. B, at 4; Dkt. No. 54, at 2; Dkt. No. 57, at 11–12; Dkt. No. 59-1, at 13.) The

parties submit that these terms appear in claims of the '217 Patent. (Dkt. No. 46, Ex. B, at 4.)

(1) The Parties' Positions

Plaintiff argues that "[t]he Court's reasoning [in Phase 2], . . . as well as the intrinsic

evidence, support the inclusion of 'computer presentations.'" (Dkt. No. 54, at 2.)

Defendants respond by revising their proposal so as to be identical to the Court's Phase 2

construction. (Dkt. No. 57, at 12.) Defendants argue that "[i]n view of the unambiguous

intrinsic record, the Court's previous construction specifying that 'television programing

(including its video and audio components) is a single form of media' should remain." (Id.,

at 14.) Further, as to Plaintiff's proposal of "computer presentations," Defendants argue that the

Court rejected such a proposal in Phase 2. (Id.)

Plaintiff replies that "TCL itself recognized the appropriateness of including computer-

based media when it included 'Internet' in its previous proposed construction." (Dkt. No. 58,

at 3.)

(2) Analysis

Defendants propose the construction that the Court reached in Phase 2, in which the

Court found that "[t]he intrinsic record is clear that television is a single medium." Phase 2

at 23; see id. at 22–25; see, e.g., Dkt. No. 54, Ex. 9, U.S. Pat. No. 4,694,490 ("the '490 Patent")

at 3:51–56, 18:8–13 & 19:30–67 (cited in Phase 2).

Plaintiff has not justified departing from the Court's construction in Phase 2 that

"television programing (including its video and audio components) is a single form of media."

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can be considered probative, Plaintiff has not shown that referring to the "Internet" is tantamount
to referring to a "computer presentation."

For example, the specification appears to recognize a distinction between "television" and "combined medium programming." See, e.g., '217 Patent at 167:52–58 ("any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming"). Defendants have also submitted prosecution history of the '217 Patent, cited by the Court in Phase 2 (see Phase 2 at 24–25), in which the Board of Patent Appeals and Interferences referred to "medium" in the context of television as "the picture and sound information carried by the television signal." (Dkt. No. 57, Ex. B, Jan. 13, 2009 Decision on Appeal, at 24 (emphasis added).)

As to Plaintiff's proposal that the list of examples should include "computer presentations," Plaintiff has not shown sufficient support in the intrinsic record for including this as part of the construction. In particular, Plaintiff has not shown how the disclosure of "any form of electronically transmitted programming" amounts to a disclosure of computer presentations. See '217 Patent at 1:55–65 ("Today great potential exists for combining the capacity of broadcast communications media to convey ideas with the capacity of computers to process and output user specific information.") & 167:52–58. The ancestor '490 Patent refers to "when real-time video programing is co-ordinated with presentations from a microcomputer working with data supplied earlier." '490 Patent at 3:56–60. Yet, the '490 Patent has a filing date of November 3, 1981, and Plaintiff has not demonstrated how the phrase "presentations from a microcomputer" would have been understood at that time. Read in context of the "Wall Street Week" example, the disclosure regarding "presentations from a microcomputer" appears to refer to presentations akin to "a microcomputer generated graphic of his [(the viewer's)] own stocks' performance overlay [sic] the studio generated graphic." Id. at 19:67–20:2; see '217 Patent at 14:16–19 ("microcomputer generated graphic of the subscriber's own portfolio performance overlaid on

the studio generated graphic"); see also id. at Fig. 1C. Plaintiff's proposal of referring to

"computer presentations," by contrast, would appear to be much broader than such a graphic

overlay. In short, disclosure of computer processing does not demonstrate that the patentee used

the term "medium" to include computer presentations. Also of note, the parties' proposals

already separately refer to "graphics." The Court therefore rejects Plaintiff's proposal of

"computer presentations."

The Court accordingly hereby construes **"media"** and **"medium"** to mean **"forms of**

electronically transmitted programming, such as audio, video, graphics, and/or text;

television programing (including its video and audio components) is a single form of

media."

D. "predetermined identifier"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
A digital identifier having a previously established value.	"identifier determined prior to receiving signals at the receiver"

(Dkt. No. 46, Ex. B, at 4; Dkt. No. 54, at 3; Dkt. No. 57, at 16; Dkt. No. 59-1, at 24.) The parties

submit that this term appears in claims of the '217 Patent. (Dkt. No. 46, Ex. B, at 4–5.)

(1) The Parties' Positions

Plaintiff argues that "TCL's proposed construction is duplicative of and incompatible

with the rest of the claim language, which explicitly establishes a different requirement regarding

the temporal relationship to receiving signals." (Dkt. No. 54, at 4.)

Defendants respond that "the claim language plainly indicates that the predetermined

identifier resides in the receiver, not the transmitter or the transmitted signal, and is therefore

logically determined before the receiver receives signals." (Dkt. No. 57, at 16.) Defendants

submit that "even though the term 'predetermined identifier' is not explicitly defined in the

specification, language within the specification suggests that the predetermined identifier is determined prior to receiving signals at the receiver." (Id., at 17.) As to Plaintiff's proposed construction, Defendants argue that "nothing in the claim language suggests that the predetermined identifier is digital." (Id., at 18.) Further, Defendants argue that Plaintiff's proposal of "previously" "is either overbroad or simply indefinite" because Plaintiff's proposal lacks "any reference point for determining if such time is 'previous' or not." (Id., at 19.) Defendants conclude that "PMC's proposal is little more than a veiled attempt to rely on values set at the transmitter as opposed to predetermined at the receiver station as plainly required by other aspects of the claim language discussed above." (Id.)

Plaintiff replies that "TCL's proposal is inconsistent with the claim language, on its face, and with the Court's previous construction." (Dkt. No. 58, at 3.)

(2) Analysis

In prior litigation, "Samsung and PMC agree[d] that the terms 'identifier' and 'predetermined identifier' do not require construction beyond their plain and ordinary meaning." (Dkt. No. 54, Ex. 10, July 21, 2016 Plaintiff Personalized Media Communications, LLC's Omnibus Opening Claim Construction Brief For Civil Action No. 2:15-CV-01366 And Phase Two Of Civil Action No. 2:15-CV-01206, at 47.)

Claim 1 of the '217 Patent, for example, recites (emphasis added):

1. A method of outputting a multimedia presentation at a receiver station adapted to receive a plurality of signals, said method comprising the steps of:
     receiving said plurality of signals including at least two media which include a first medium received in a digital data channel from a source external to said receiver station;
     storing information from said first medium in a storage medium at a computer at said receiver station;
     determining content, through use of processor instructions resident on said computer at said receiver station, of each medium received after said first medium

in said plurality of signals, wherein determining content of each medium comprises:

> processing an identifier which identifies said content of each of said medium:
>
> comparing said processed identifier to a predetermined identifier, wherein said predetermined identifier is determined at a time prior to receiving said plurality of signals;

coordinating, through use of processor instructions resident on said computer at said receiver station, a presentation using said information with a presentation of a medium comprising an identifier that matches said predetermined identifier based on said step of determining content; and

outputting and displaying said multimedia presentation to a user at said receiver station based on said step of coordinating such that said presentation using said information has a predetermined relationship to said content of said medium comprising an identifier that matches said predetermined identifier and said content of said medium comprising an identifier that matches said predetermined identifier explains a significance of said presentation using said information.

The claim thus explicitly provides meaning for "predetermined," and the other independent claims in which this term appears are similar in this regard. See '217 Patent at Cls. 11 ("wherein said predetermined identifier is determined at a time prior to receiving said plurality of signals and identifies content of said first medium"), 16 ("said predetermined identifier being determined prior to receiving said plurality of media and identifying content of said first medium"), 20 ("said predetermined identifier determined prior to receiving said plurality of signals and identifying content of said first medium"), 30 ("wherein said predetermined identifier is determined at a time prior to receiving said plurality of signals and said second medium includes an identifier that matches said predetermined identifier"), 38 ("wherein said predetermined identifier is determined at a time prior to receiving said plurality of signals and identifies content of said first medium"), 43 ("said predetermined identifier determined prior to receiving said plurality of signals and identifying content of said first

medium") & 47 ("said predetermined identifier determined prior to receiving said plurality of signals and identifying content of said first medium").

As a general matter, redundancy in a construction is not prohibited. See 01 Communique Lab., Inc. v. LogMeIn, Inc., 687 F.3d 1292, 1296 (Fed. Cir. 2012) ("we have not discovered[] any authority for the proposition that construction of a particular claim term may not incorporate claim language circumscribing the meaning of the term").

Nonetheless, because Defendants' proposed construction would render some of the above-quoted claim language redundant (or would potentially be inconsistent therewith), Defendants' proposed construction is disfavored. See Apple, Inc. v. Ameranth, Inc., 842 F.3d 1229, 1237 (Fed. Cir. 2016) ("Ideally, claim constructions give meaning to all of a claim's terms. Construing a claim term to include features of that term already recited in the claims would make those expressly recited features redundant.") (citing Merck & Co. v. Teva Pharm. USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005)).

Defendants have cited disclosure in the specification regarding "preprogrammed":

> Microcomputer, 205, is preprogrammed to receive said input of signals at its asynchronous communications adapter and to respond in a predetermined fashion to [] signals embedded in the [] programming transmission.

'217 Patent at 11:58–12:2 (emphasis added); see id. at 21:4–17 ("decoders are preprogrammed") & 47:1–18 ("All subscriber station apparatus are fully preprogrammed to perform automatically each step of each example. No manual step is required at any station."). Defendants argue that "[i]f the receiver station was unaware of the 'predetermined identifier' before receiving the incoming signal, the microcomputer within the receiver would not be preprogrammed and could not respond in a predetermined fashion." (Dkt. No. 57, at 17.)

Yet, whereas Defendants' proposal apparently would require the identifier to be determined prior to receiving any signals at the receiver, above-quoted Claim 1 recites that "said predetermined identifier is determined at a time prior to receiving said plurality of signals."

Defendants have also urged that the predetermined identifier must be resident on the receiver station. (Dkt. No. 57, at 16 ("Since the resources used to make the determination about received content are 'resident on said computer at said receiver station,' the predetermined identifier must itself be resident at said receiver station.").) But whereas above-quoted Claim 1 recites "processor instructions resident on said computer at said receiver station," no such limitation is recited as to the predetermined identifier. The Court therefore rejects Defendants' argument in this regard.

Finally, Plaintiff has proposed that the predetermined identifier must be digital, but no such limitation is apparent in the claim language, and Plaintiff has not shown any definition or disclaimer. For example, Plaintiff has not shown that disclosures regarding microprocessors, programming, and digital signals necessarily require a digital predetermined identifier. See '217 Patent at 8:15–34 ("signals may convey information in discrete words"), 12:29–32 ("Decoder, 203, detects the embedded instruction information, corrects it as required, converts it into digital signals usable by microcomputer, 205, and transmits said signals to microcomputer, 205.") & 19:57–60 ("microprocessor control instructions"); see also '490 Patent at 11:18–24 ("each discrete unit of programing identified with a unique program code") & 18:44–59 ("In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with all incoming signals."). Further, even if disclosures in the specifications were interpreted as disclosing a

digital predetermined identifier, the claims should not be limited to this specific feature of particular disclosed embodiments. See Phillips, 415 F.3d at 1323.

Based on all of the foregoing, the Court hereby expressly rejects Defendants' proposed construction, which would require the identifier to be resident on the receiver and determined prior to receiving any signals at the receiver. The Court also hereby expressly rejects Plaintiff's proposal of "digital" as lacking support in the intrinsic record, as discussed above. No further construction is necessary in light of the context provided by express recitals in the claims. See U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); see also O2 Micro *Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike O2 Micro, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *ActiveVideo Networks, Inc. v. Verizon Commcn's, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); Summit 6, LLC v. Samsung Elecs. Co., Ltd., 802 F.3d 1283, 1291 (Fed. Cir. 2015).

The Court accordingly hereby construes **"predetermined identifier"** to have its **plain meaning**.

E. "among said plurality of programmable processors"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Between some or all of the programmable processors.	Among each of the plurality of programmable processors[3]

(Dkt. No. 46, Ex. B, at 8; Dkt. No. 54, at 5; Dkt. No. 57, at 19; Dkt. No. 59-1, at 1.) The parties

submit that this term appears in claims of the '885 Patent. (Dkt. No. 46, Ex. B, at 8.)

(1) The Parties' Positions

Plaintiff argues that "'among' does not mean 'each,'" and Plaintiff urges that the

prosecution history contains no disclaimer in this regard. (Dkt. No. 54, at 6.) Plaintiff also

argues that "[t]here is nothing in the patent or its prosecution history that suggests the

programmable processors must be limited to being located 'in the receiver station.'" (Dkt.

No. 54, at 6.)

Defendants respond by revising their proposal so as to be identical to the Court's Phase 2

construction. (Dkt. No. 57, at 19.) Defendants argue that "TCL's proposed construction

including 'each' is clearly in line with what the '217 patent's applicant argued to distinguish his

invention from the prior art [during prosecution] and thus serves as a disclaimer of claim scope."

(Id., at 20.)

Plaintiff replies that the prosecution history cited by Defendants does not "limit[] [the]

claim[s] to addressing 'each' programmable processor within the plurality, rather than just some

or all." (Dkt. No. 58, at 6.) Plaintiff argues: "The prosecution history upon which TCL premises

its entire argument: 1) clearly recognizes the distinction between 'each' and 'among'; and

---

[3] Defendants previously proposed: "Among each of the plurality of programmable processors in
the receiver station." (Dkt. No. 46, Ex. B, at 8 (emphasis added).)

2) references only each plurality of programmable processors to denote a group of more than one

processor, and not each individual programmable processor within that group." (Id., at 6–7.)

<u>(2) Analysis</u>

Claims 102, 109, and 110 of the '885 Patent recite (emphasis added):

102. A method of processing signals in a video receiver, said video receiver
having a plurality of programmable processors, said method comprising the steps
of:
    receiving a video signal;
    detecting a stream of digital data in said video signal;
    passing a first portion of said stream of digital data among said plurality of
programmable processors in a first passing fashion;
    passing a control portion of said stream of digital data to a programmable
control processor;
    controlling, with said programmable control processor, the passing of a
second portion of said stream of digital video data among said plurality of
programmable processors in a second passing fashion in response to said passed
control portion;
    processing said passed second portion of said stream of digital data and
outputting processed information from said plurality of programmable processors
to a video display apparatus; and
    displaying video at said video display apparatus based on said outputted
processed information from said plurality of programmable processors.

In Phase 2, the Court found as follows regarding Claim 102 of the '885 Patent:

As drafted, the plain claim language could arguably take on one of two meanings:
"some or all" or "each." Each party points to the intrinsic record as support for
their position. Though claim language varying among terms is indicative of the
differing meanings, it is not an absolute rule. See Marine Polymer Tech., Inc. v.
HemCon, Inc., 672 F.3d 1350, 1359 (Fed. Cir. 2012) (claim differentiation cannot
"overcome . . . a contrary construction dictated by the written description or
prosecution history."). Here, the applicants twice prescribed in prosecution a
meaning to "among" as used in the asserted claim. That such meaning was
"mistakenly" made is not clear in the record. The applicants' statements,
however, do clearly reference "among" in the context of "each" processor with
regard to the asserted claim.

The Court construes "among said plurality of programmable processors" to mean
"among each of the plurality of programmable processors."

Phase 2 at 56–57. In so finding, the Court considered the prosecution history and also considered that Claims 109 and 110 use "each." (See id. at 54–57; see also Dkt. No. 54, Ex. 14, Jan. 15, 2014 Response, at 49.)

Plaintiff's arguments against the Phase 2 analysis are unpersuasive. See, e.g., Tech. Props. Ltd. LLC v. Huawei Techs. Co., 849 F.3d 1349, 1359 (Fed. Cir. 2017) ("[T]he scope of surrender is not limited to what is absolutely necessary to avoid a prior art reference; patentees may surrender more than necessary. When this happens, we hold patentees to the actual arguments made, not the arguments that could have been made. The question is what a person of ordinary skill would understand the patentee to have disclaimed during prosecution, not what a person of ordinary skill would think the patentee needed to disclaim during prosecution.") (citations omitted); Springs Window Fashions LP v. Novo Indus., L.P., 323 F.3d 989, 995 (Fed. Cir. 2003) ("If the applicant mistakenly disclaimed coverage of the claimed invention, then the applicant should have amended the file to reflect the error, as the applicant is the party in the best position to do so."); see Marine Polymer, 672 F.3d at 1359 (claim differentiation cannot "overcome . . . a contrary construction dictated by the written description or prosecution history").

The Court therefore hereby construes **"among said plurality of programmable processors"** to mean **"among each of the plurality of programmable processors."**

F. **"command[s]"**

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Signal that causes performance of a function.	An instance of signal information that is addressed to a particular subscriber station apparatus and that causes said apparatus to perform a particular function or functions, and that always includes at least a header and an execution segment.

(Dkt. No. 46, Ex. B, at 9; Dkt. No. 54, at 6; Dkt. No. 57, at 23; Dkt. No. 59-1, at 3.) The parties

submit that this term appears in claims of the '650 Patent. (Dkt. No. 46, Ex. B, at 9.)

(1) The Parties' Positions

Plaintiff argues that Defendants' proposal "runs afoul of the cardinal rule of claim

construction that preferred embodiments should not be excluded." (Dkt. No. 54, at 7.) Further,

Plaintiff argues that "the level of granularity of Defendants' construction would be needlessly

confusing to a jury." (Id.)

Defendants respond that they propose the definition set forth in the specification and

adopted by the Court in Phase 2. (Dkt. No. 57, at 23.) Defendants submit: "PMC urges the

Court to depart from its previous construction and the patentee's definition for 'command' based

on the disclosure of a 'pseudo command' and a 'meter command' elsewhere in the specification,

but the Court already rejected this same argument in the previous litigation." (Id., at 24.)

Further, Defendants argue that "the patentee explicitly defined a claim term in the patent

specification, and regardless of PMC's belief that the chosen language is confusing, the

patentee's lexicography should govern." (Id., at 25–26.)

Plaintiff replies that "in view of the language surrounding 'command[s]' in claims 1

and 18, the limitations set forth in the specification are subsumed within the meaning and

definitions of the claim terms themselves," and "to import the limitations in the specification into

the claim itself will create unnecessary confusion." (Dkt. No. 58, at 7.)

(2) Analysis

In Phase 2, the Court construed "command[s]" to mean "an instance of signal

information that is addressed to particular subscriber station apparatus and that causes said

apparatus to perform a particular function or functions. A command is always constituted of at

least a header and an execution segment." Phase 2 at 61. The Phase 2 analysis cited the

following disclosures in the specification (see id. at 59–60):

> A command is an instance of signal information that is addressed to particular subscriber station apparatus and that causes said apparatus to perform a particular function or functions. A command is always constituted of at least a header and an execution segment. With respect to any given command, its execution segment contains information that specifies the apparatus that said command addresses and specifies a particular function or functions that said command causes said apparatus to perform. (Hereinafter, functions that execution segment information causes subscriber station apparatus to perform are called "controlled functions.")

'217 Patent at 23:34–43. The Court found that this disclosure defines the term "command." See

Phase 2 at 60; see also Phillips, 415 F.3d at 1316 ("[O]ur cases recognize that the specification

may reveal a special definition given to a claim term by the patentee that differs from the

meaning it would otherwise possess. In such cases, the inventor's lexicography governs.").

Phase 2 also found that this definition was not contradicted in the following disclosure

regarding a "pseudo command" (see Phase 2 at 60):

> The preferred embodiment includes one appropriate command (hereinafter called the "pseudo command") that is addressed to no apparatus and one command that is addressed to URS signal processors, 200, (hereinafter, the "meter command") but does not instruct said processors, 200, to perform any controlled function. These commands are always transmitted with meter-monitor segment data that receiver station apparatus automatically process and record. By transmitting pseudo command and meter command signals, transmission stations cause receiver station apparatus to record meter-monitor segment information without executing controlled functions. The pseudo command enables a so-called ratings service to use the same system for gathering ratings on conventional programming transmissions that it uses for combined media without causing combined media apparatus to execute controlled functions at inappropriate times (eg., combine overlays onto displays of conventional television programming). The meter command causes apparatus such as controller, 12, of FIG. 2D to transmit meter information to buffer/comparator, 14, without performing any controlled function.

'217 Patent at 25:33–53. In particular, Phase 2 found that a "pseudo command" is an exception

and is different from a "command." Phase 2 at 61.

Plaintiff has argued that certain "details" "should be excluded from construction to save

the jury from unnecessary confusion" (Dkt. No. 54, at 8), but "[w]hen a patentee explicitly

defines a claim term in the patent specification, the patentee's definition controls." Martek

Biosciences Corp. v. Nutrinova, Inc., 579 F.3d 1363, 1380 (Fed. Cir. 2009).

Finally, in the present case, Plaintiff has further cited disclosure regarding "specified

condition commands":

> Particular commands (called, hereinafter, "specified condition commands")
> always contain meter-monitor segments. Said commands cause addressed
> apparatus to perform controlled functions only when specified conditions exist,
> and meter-monitor information of said commands specifies the conditions that
> must exist.

'217 Patent at 23:52–57. Plaintiff has not shown, however, any inconsistency between this

disclosure and the patentee's above-reproduced definition. See id. at 23:34–43. In sum, Plaintiff

has not justified departing from the Court's construction in Phase 2.

The Court accordingly hereby construes **"command"** to mean **"an instance of signal

information that is addressed to particular subscriber station apparatus and that causes

said apparatus to perform a particular function or functions. A command is always

constituted of at least a header and an execution segment."**

G. "control[ling] said digital switch"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
This term does not require construction beyond its plain and ordinary meaning.	Directly controlling said digital switch.

(Dkt. No. 46, Ex. B, at 10; Dkt. No. 54, at 8.) The parties submit that this term appears in claims

of the '650 Patent. (Dkt. No. 46, Ex. B, at 10.)

Defendants have submitted: "Upon further consideration, and in the interest of narrowing

disputes for the Court to resolve, TCL agrees the phrase 'control[ling] said digital switch' does

not require construction." (Dkt. No. 57, at 26.) Plaintiff has replied: "TCL has withdrawn its dispute over this term and now agrees that it does not require construction beyond its plain and ordinary meaning." (Dkt. No. 58, at 7.)

The parties' June 15, 2018 Joint Claim Construction Chart Pursuant to P.R. 4-5(d) confirms the parties' agreement in this regard. (Dkt. No. 59-1, at 8.)

The Court therefore hereby construes **"control[ling] said digital switch"** to have its "**plain and ordinary meaning**." (Id.)

H. Order of Steps of Claim 9 of the '6649 Patent

Plaintiff's Proposed Construction	Defendants' Proposed Construction
The steps of claim 9 of the [']6]649 patent need not be performed in the order disclosed.	"Programming" step is performed prior to the "inputting logic" step. "Receiving one or more instruct signals["] step[] is performed prior to the "inputting logic" step. "Inputting logic" step is performed prior to the "Receiving a plurality of discrete signals" step.

(Dkt. No. 46, Ex. B, at 11–12; Dkt. No. 54, at 9; Dkt. No. 57, at 26; Dkt. No. 59-1, at 22–23.)

(1) The Parties' Positions

Plaintiff argues that, here as in Phase 1, the Court should find that the claimed method could be performed in various ways and should not be limited to the order of steps proposed by Defendants. (Dkt. No. 54, at 9.)

Defendants respond that "the sequential and dependent nature of the claim language is apparent from the limitations as written, thus requiring them to be performed in a certain order, and there is nothing in the specification that suggests otherwise." (Dkt. No. 57, at 27.)

Plaintiff replies that the "inputting" and "programming" steps "are preparatory steps at the receiver station and neither depends on the other step generating specific information or performing any other condition precedent." (Dkt. No. 58, at 7–8.) Plaintiff also emphasizes that "the inputting logic step has the purpose of 'enabl[ing] said receiver station to receive and identify said variable formats in accordance with one or more said instruct signals,'" and Plaintiff argues:

> Nothing in the claim language suggests that enabling the station to receive and identify formats in accordance with instruct signals requires knowing in advance what the instruct signals are, much less actually receiving them. Indeed, it would make at least as much sense for the enabling step to occur before receiving the instruct signals, rather than after.

(Id., at 8.)

(2) Analysis

"As a general rule, '[u]nless the steps of a method [claim] actually recite an order, the steps are not ordinarily construed to require one.'" Mformation Techs., Inc. v. Research in Motion Ltd., 764 F.3d 1392, 1398 (Fed. Cir. 2014) (quoting Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1342 (Fed. Cir. 2001)).

Courts apply a two-part test to determine whether a particular order of steps is required: "First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written," and "[i]f not, we next look to the rest of the specification to determine whether it directly or implicitly requires such a narrow construction." Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369–70 (Fed. Cir. 2003) (citation omitted); see Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc., 152 F.3d 1368, 1376 (Fed. Cir. 1998) ("the sequential nature of the claim steps is apparent from the plain meaning of the claim language"); see also E-Pass Techs., Inc. v. 3Com Corp., 473 F.3d 1213, 1222 (Fed. Cir. 2007) ("[B]ecause the language of

most of the steps of its method claim refer to the completed results of the prior step, E–Pass must

show that all of those steps were performed in order.").

Claim 9 of the '6649 Patent recites (formatting modified; emphasis added):

9. A method for receiving and outputting television programming at a programmable receiver station, said receiver station having a television receiver, a tuner, a tuner controller, a detector, a processor or computer, and a television monitor, said tuner controller receiving instructions from said processor or computer to control said tuner to frequency select television signals, said detector for detecting digital signals, said method comprising the step of:
 programming said programmable receiver station with multiple signal processing schemes to process television programming signals encoded in variable formats in accordance with said multiple signal processing schemes, said variable formats including at least two of varying locations, varying timing lengths and varying encryption schemes;
 receiving one or more instruct signals;
 inputting logic into said processor or computer to enable said receiver station to receive and identify said variable formats in accordance with said one or more instruct signals;
 receiving a plurality of discrete signals identified according to a particular format of said variable formats, said plurality of discrete signals delivering at least a portion of television programming;
 processing said plurality of discrete signals according to one of said multiple signal processing schemes implemented by said one or more instruct signals to identify said particular format of said variable formats and demodulate or demultiplex said at least a portion of said television programming; and
 outputting said at least a portion of said television programming.

In Phase 2, the defendants proposed the same construction that Defendants here propose,

and in Phase 2 the Court found:

Ordinarily, a method claim is not construed to require that its constituent steps be performed in a particular order unless the claim recites an order. Interactive Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1342 (Fed. Cir. 2001). A method claim that does not recite an order may nonetheless be construed to require that the claim's steps be performed in a particular order if (1) the claim language, "as a matter of logic or grammar" requires that the steps be performed in a particular order, or (2) the specification "directly or implicitly requires such a narrow construction." See Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369–70 (Fed. Cir. 2003). Defendants have pointed out neither. There is no reason (in the claims or specification) that the inputting logic step could not be performed before the programming step or the receiving one or more instruct signals step. Similarly, there is no reason that the receiving a plurality of discrete signals step

could not be performed before the inputting logic step. Defendants' specific ordering requirements are rejected.

The Court finds that the steps of 6'649 Patent claim 9 need not be performed in the recited order.

Phase 2 at 74–75.

Defendants have not justified departing from the Court's construction in Phase 2. For example, Defendants have not shown that any order is required with regard to the "enabl[ing]" set forth in the step of "inputting logic into said processor or computer to enable said receiver station to receive and identify said variable formats in accordance with said one or more instruct signals." Nothing in the claim restricts whether this enabling occurs before or after receiving "instruct signals" or "discrete signals."[4]

The Court therefore hereby expressly rejects Defendants' proposal and finds that **the steps of Claim 9 of the '6649 Patent need not be performed in the recited order**.

I. Order of Steps of Claim 10 of the '6649 Patent

Plaintiff's Proposed Construction	Defendants' Proposed Construction
The steps of claim 10 of the ['6]649 patent need not be performed in the order disclosed.	"Programming" step is performed prior to the "inputting logic" step. "Receiving one or more instruct signals["] step[] is performed prior to the "inputting logic" step. "Inputting logic" step is performed prior to the "Receiving a plurality of discrete signals" step.

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[4] Defendants have also argued that Plaintiff admitted an order of steps in what Defendants have attached as their Exhibit C, Personalized Media Communications, LLC v. Samsung Electronics America, Inc., et al., 2:15-CV-1754, Dkt. No. 35, at 15–16 (Response in Opposition to the Samsung Defendants' Rule 12(b)(6) Motion to Dismiss for Failure to State a Claim), but no relevant admission or estoppel has been shown.

(Dkt. No. 46, Ex. B, at 13; Dkt. No. 54, at 10; Dkt. No. 57, at 26; Dkt. No. 59-1, at 23–24.)

<u>(1) The Parties' Positions</u>

Plaintiff submits that Claim 10 of the '6649 Patent is dependent from Claim 9 and that the steps at issue in Defendants' proposal appear in Claim 9. (Dkt. No. 54, at 10–11.) Plaintiff argues that "there is nothing additional or different in claim 10 that would warrant departing from the presumptive rule, and this Court's previous ruling." (Id., at 11.)

Defendants present the same arguments for Claim 10 as for above-discussed Claim 9. (See Dkt. No. 57, at 26 n.26 ("Claim 10 includes the elements of claim 9, and the parties advance the same constructions in both instances.").)

Plaintiff replies: "TCL does not argue that there is any additional basis to require ordering of claim 10. For the reasons stated above, claim 10 also does not require that the steps be performed in a particular order." (Dkt. No. 58, at 8.)

<u>(2) Analysis</u>

For the same reasons set forth above as to Claim 9 of the '6649 Patent, the Court hereby expressly rejects Defendants' proposal and finds that **the steps of Claim 10 of the '6649 Patent need not be performed in the recited order**.

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patent-in-suit, and in reaching conclusions the Court has considered extrinsic evidence. The Court's constructions thus include subsidiary findings of fact based upon the extrinsic evidence presented by the parties in these claim construction proceedings. See Teva, 135 S. Ct. at 841.

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.

Within thirty (30) days of the issuance of this Memorandum Opinion and Order, the parties are hereby **ORDERED**, in good faith, to mediate this case with the mediator agreed upon by the parties. As a part of such mediation, each party shall appear by counsel (with lead and local counsel present and participating) and by at least one corporate officer possessing sufficient authority and control to unilaterally make binding decisions for the corporation adequate to address any good faith offer or counteroffer of settlement that might arise during such mediation. Failure to do so shall be deemed by the Court as a failure to mediate in good faith and may subject that party to such sanctions as the Court deems appropriate. No participant shall leave the mediation without the approval of the mediator.

So ORDERED and SIGNED this 29th day of June, 2018.

_____
RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE