IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

MV3 PARTNERS LLC, ***Plaintiff***	§	
	§	
	§	**6:18-CV-00308-ADA**
-v-	§	
	§	
ROKU, INC., ***Defendant***	§	
	§	
	§	

CLAIM CONSTRUCTION ORDER

Before the Court are the parties' claim construction briefs: Plaintiff MV3 Partners' ("MV3") opening, responsive, and reply briefs (ECF No. 64, 73, and 77, respectively) and Defendant Roku's opening, responsive, and reply briefs (ECF No. 68, 72, and 76, respectively). The Court held the *Markman* hearing on July 19, 2019. ECF Nos. 82–83. During that hearing, the Court informed the Parties of the constructions it intended to provide. This Order does not alter any of those constructions.

I. Background

MV3 filed this lawsuit on October 16, 2018 alleging that Roku infringed U.S. Patent No. 8,863,223. ECF No. 1. Roku answered on January 22, 2019. ECF No. 39. MV3 asserts claims 1–3, 5, 6, 15, 21, 23, 25, 29–35, 37, 38, 47, 53, 55–57, 59, and 61.

The '223 Patent is entitled "Mobile set top box." According the specification of the '223 Patent, the invention described therein solved at least the two of the problems that were present in the prior art. First, prior art set top boxes could "only be used with the network that provides the box," *e.g.*, Comcast or Verizon FIOS. '223 Patent at 1:32–35. Second, prior art mobile computing devices could not "up-convert" the content intended for a mobile computing device,

which may have a three inch screen, so that the content properly fits on a large screen high-definition television. *Id.* at 2:38-61.

The '223 Patent describes a mobile set top box that "acts as a conduit between disparate data networks and display devices." *Id.* at 2:65-67. Figure 4 illustrates the implementation of a disclosed embodiment. *Id.* at 3:59–61.

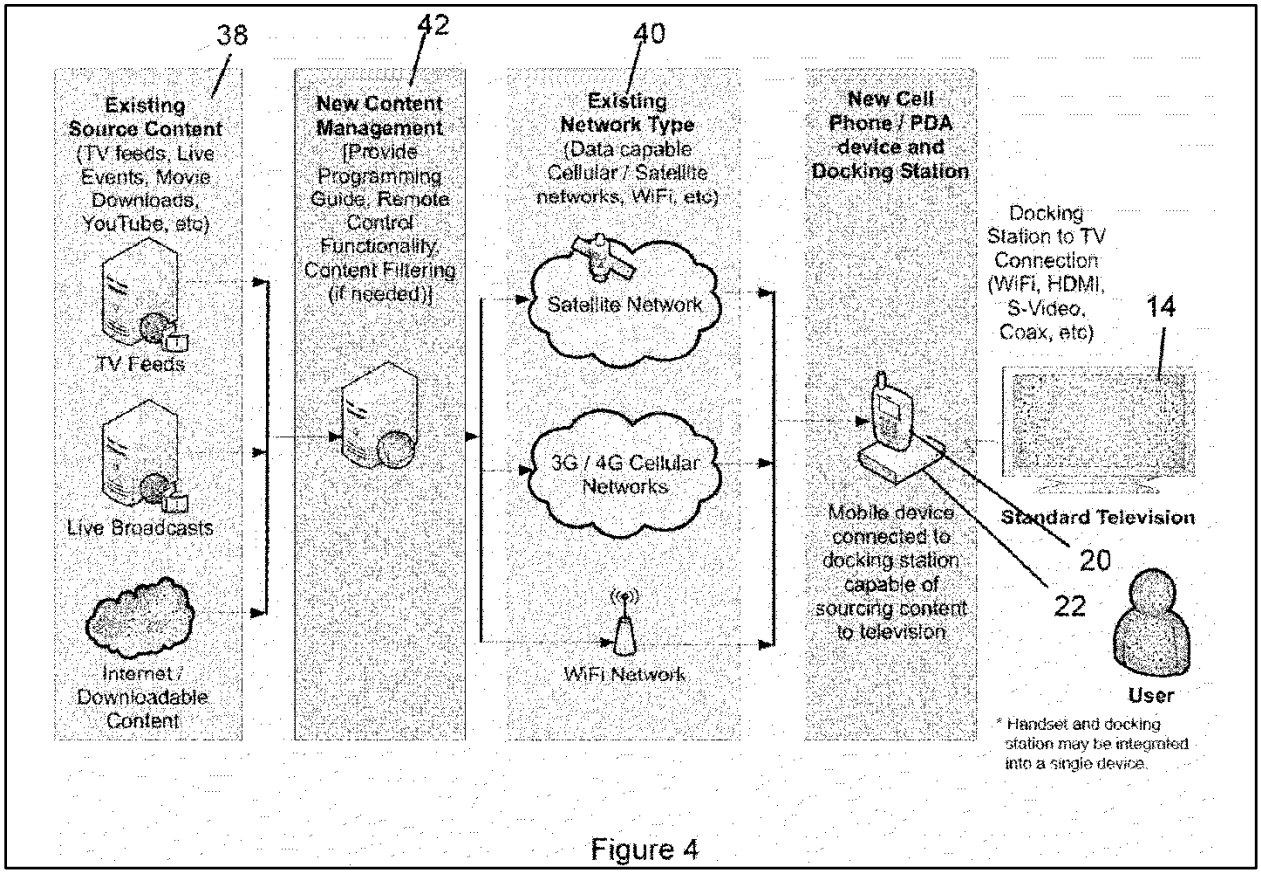

Figure 4

Label 38 in Figure 4 refers to different types of existing source content, *e.g.*, TV feeds, live broadcasts, and internet/downloadable content, which are stored on disparate data networks. *Id.* at 5:27–29. Label 42 refers to the new content management, which provides, for example, a program guide, remote control functionality, and content filtering. *Id.* at 5:45–51. Label 40 refers to potential wired and wireless networks that may be used to transfer the content from each data network to the mobile set top box. *Id.* at 5:48–51. Labels 20 and 22 refer to the mobile

computing device and the docking station, respectively. *Id.* at 5:33–35. The mobile computing device and the docking station may be combined into one device. *Id.* at 4:49–54 ("As illustrated, the cellular phone 20 merely passes information to the docking station 22 and is controlled by the docking station 22. However, the functionality of the mobile set top box 10 can be in either device. In addition, the mobile phone 20 and docking station 22 can be combined into one device."); *see also id.* at Fig. 4. After receiving the content from the mobile computing device, the docking station up-scales the content and displays it on the television. *Id.* at 5:40–43. The connection between the docking station and television may be wired or wireless. *Id*. at 5:64–65 *see also id.* at Fig. 4.

II. Legal Principles

The general rule is that claim terms are generally given their plain and ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (vacated on other grounds). The plain and ordinary meaning of a 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." *Philips*, 415 F.3d at 1313.

"'Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in

the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can also be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony also may be helpful, but an expert's conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

The "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* at 1365. To disavow the full scope of a claim term, the patentee's statements in the specification or prosecution history must represent "a clear disavowal of claim scope." *Id.* at 1366. Accordingly, when "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

Courts presume that the preamble does not limit the claims. *Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358 (Fed. Cir. 2010) (quoting *Allen Eng'g Corp. v. Bartell Indus.*, Inc., 299 F.3d 1336, 1346 (Fed. Cir. 2002)) ("Generally," we have said, "the preamble does not

limit the claims."). But "[i]n general, a preamble limits the invention if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim." *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). "Conversely, a preamble is not limiting 'where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.'" *Catalina*, 289 F.3d at 808 (quoting *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997)). The Federal Circuit has provided some "guideposts" regarding whether the preamble is limiting: (1) preamble provides antecedent basis, (2) preamble is essential to understand limitations or terms in the claim body, (3) preamble recites "additional structure or steps underscored as important by the specification," and (4) "clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art." *Catalina*, 289 F.3d at 808–09.

The order in which steps of a method appear in a claim is not a limitation on that claim unless either (1) "as a matter of logic or grammar, [the steps] must be performed in the order written" or (2) the specification "directly or implicitly requires such a narrow construction." *Altiris Inc. v. Symantec Corp.*, 318 F. 3d 1363, 1369-70 (Fed. Cir. 2003) (internal quotations and citations omitted). The specification and prosecution history can support a construction requiring the steps to be performed in the order written in the claims. *See, e.g., Loral Florchild Corp. v. Sony Corp.*, 181 F.3d 1313, 1321–22 (Fed. Cir. 1999); *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1320 (Fed. Cir. 2013).

III. Legal Analysis

After reviewing the parties' briefing, the Court determines that "television signal," "docking port,"[1] "configured to accept," "accepted in," "adaptive circuitry," and "determining, based on the validity of the user, that the received first media content is permitted to be provided to the display device" be given their plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it. Hrg. Tr. at 7:11–17. For all these terms, neither of the exceptions to the general rule that plain and ordinary meaning applies. *Thorner*, 669 F.3d at 1365. Furthermore, none of these terms are difficult technical terms for which a construction would help the jury understand the meaning of the term. *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 2:12-cv-800-WCB, 2014 WL 3735222, at *2 (E.D. Tex., July 28, 2014).

A. "Mobile set top box" (All asserted claims)

MV3's Proposed Construction	Roku's Proposed Construction
Preamble is not limiting. Even if the Court finds the preamble to be limiting, no construction is necessary and the term should be given its plain and ordinary meaning Alternatively, the following is provided in the event the Court determines a construction is necessary: "hardware and/or software that combines the functionality of a set top box and a mobile communication system"[2]	Preamble is limiting "a device that converts an input television signal to an output signal to a [display device][3] and also permits content from a mobile computing device to be displayed on the same display device to which the device is connected"

The term "mobile set top box" appears in the preamble of two asserted claims, Claims 1 and 32. The preamble for both claims is "A mobile set top box comprising." '223 Patent, Cls. 1,

[1] During the Markman hearing, the parties agreed that "docking port" is either (1) hardware or (2) hardware and software. Hrg. Tr. at 55:2-58:3.

[2] During the Markman hearing, MV3 substituted "device" for "hardware and/or software" to remove any the ambiguity that its construction could encompass a software-only mobile set top box. Hrg. Tr. at 21:12–25:13.

[3] In its responsive brief, Roku changed its construction to swap in "display device" for "television set." ECF No. 72 at 18. Roku's construction in the parties' Joint Claim Construction Statement, however, uses "television set." ECF No. 78 at 2. Roku stated that it was "happy" to include "display device" in its construction. ECF No. 83 at 11:2–9. Accordingly, the Court considers Roku's construction to include "display device" in lieu of "television set."

32. The parties dispute both whether the preamble for Claims 1 and 32 is limiting and the proper construction of "mobile set top box." *See, e.g.*, ECF No. 64 at 21 (MV3); ECF No. 68 at 19 (Roku).

Roku contends that the preamble is limiting for several reasons. First, Roku contends that because the patentee amended the preamble from "system" to "mobile set top box" during prosecution, that "illustrates" that mobile set top box is a limiting claim element. ECF No. 68 at 19; ECF No. 72 at 17; ECF No. 76 at 10. Second, Roku also contends that "mobile set top box" is not limiting because it does not appear in the preamble of all claims and when it does, it also appears in the body of the claim. ECF No. 72 at 16–17. Third, Roku contends that the "specification confirms that the term 'mobile set top box' is an important characteristic of the claimed invention." ECF No. 72 at 17.

As a general matter, MV3 contends that Roku has not met its burden to prove that the preamble is limiting. ECF No. 64 at 20–21. MV3 offers several reasons why the preamble is not limiting. First, MV3 contends that the claim language makes it clear that the term "mobile set top box" "merely 'gives a name' or describes a set of limitations." *Id.* at 21; ECF No. 73 at 15; ECF No. 77 at 9. Second, MV3 contends that "nowhere in the prosecution history is the preamble clearly relied on to support the validity of the '223 Patent." ECF No. 64 at 21. Third, MV3 contends that even if the "preamble is 'reasonably susceptible' to being merely duplicative of the limitations in the body of the claim," the preamble is not limiting based on Federal Circuit case law. *Id.*

Based on the Court's review of the specification and the prosecution history of the '223 Patent, and the parties' briefing and arguments, the Court finds that the preamble is not limiting for several reasons. First, rather than setting forth an important characteristic of the claimed

invention as Roku claims, the Court agrees with MV3 that the term "mobile set top box" in the preamble "merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention." *IMS Tech., Inc. v. Hass Automation, Inc.*, 206 F.3d 1422, 1434 (Fed. Cir. 2000). More specifically, each of the claim limitations in Claims 1 and 32 are depicted in Figure 4 and were briefly explained above. For example, Claim 32, Limitation [a] requires a "docking port" which is depicted by Label 22. Claim 32, Limitation [b] requires a "mobile device input" which is the output arrow from Label 40. Claim 32, Limitations [c]–[e] all pertain to video processing (*e.g.*, to process the media content from unicast to multicast broadcasts), multimedia processing (*e.g.*, to interact with video on demand storage device, electronic programming guide, and a digital rights management server) which can be found within Labels 20 or 22. *See also id.* at 6:22–24. Claim 32, Limitations [f]–[m] all pertain to up-conversion and user authentication which can be found within Labels 20 or 22. *See also id.* at 6:11–18. Finally, Claim 32, Limitation [n] requires an output from Label 22 which is inputted into Label 14. Therefore, the presence of "mobile set top box" in the preambles of Claims 1 and 32 does not provide an important characteristic of the claimed invention.

Second, contrary to what Roku argues, the patentee did not clearly rely on the preamble to support the validity and/or amend the preamble to traverse a rejection. *See* ECF No. 68, Exh. 2 at MV3_ROKU0000569-70. Rather, the patentee relied on structural components within the body of the claim rather than the preamble to distinguish the Tee and Kung references. *See id.*

Third, the Roku's apparent contention that patentee's use of a term in both the preamble and the body of claim automatically render the preamble to be limiting is unsupported by case law. ECF No. 68 at 19 ("Here, 'mobile set top box' is included in the body of independent Claims 1 and 32. It also appears throughout the body of independent claim 30, and it does not

appear in the preamble of that claim at all. Thus, 'mobile set top box' is a limiting phrase since it has been included in the body of all of the independent claims.") (citations removed). Roku incorrectly relies on *Catalina* for the proposition that "mobile set top box" is a limiting phrase because it appears in both the preamble and the body of the independent claims. But in fact, in *Catalina*, the preambles for Claims 1 and 25 were not limiting. More specifically, in *Catalina*, the Federal Circuit reviewed the district court's construction of "located at predesignated sites such as consumer stores," which appeared in the preamble of Claim 1, and the preamble and body of Claim 25. *Catalina*, 289 F.3d at 807. The Circuit held that the preamble of Claim 1 was not limiting. *Id.* at 810 ("Accordingly, this court holds that the district court erroneously treated the preamble as a limitation of Claim 1."). As for Claim 25, the Circuit found that the term was a limitation, but only because it was in the body of the claim. *Id.* at 811 ("By virtue of its inclusion in the body of Claim 25, this phrase limits Claim 25."). The remainder of the Circuit's discussion regarding Claim 25 was directed to the proper construction of that term. *See id.* at 810–13. Because there is no rule that a that patentee's use of a term in both the preamble and the body of claim automatically render the preamble to be limiting, for the reasons already provided above, the Court does not change its conclusion that the preamble is not limiting.

The Court now turns to the proper construction of "mobile set top box." MV3 contends that no construction is necessary as the term should be given its plain and ordinary meaning or, in the alternative, that the correct construction is "hardware and/or software that combines the functionality of a set top box and a mobile communication system." ECF No. 64 at 20; ECF No. 73 at 17; ECF No. 77 at 10. Roku contends that the correct construction for this term is "a device that converts an input television signal to an output signal to a display device and also permits content from a mobile computing device to be displayed on the same display device to

which the device is connected." ECF No. 68 at 19–20; ECF No. 72 at 16; ECF No. 76 at 10–11; ECF No. 78 at 2.

As a preliminary matter, a plain and ordinary construction for this term is inappropriate because "mobile set top box" was an unknown term at the time of the invention. *Id.* at 22:22–25 (Ms. Mandrusiak: "I would just reiterate that plain and ordinary meaning can't apply here because [MV3's expert] and both parties agree that this is an unknown term. So plain and ordinary meaning for an unknown term just doesn't exist.").

The Court determines that the proper construction for "mobile set top box" is MV3's construction which recites "a device that combines the functionality of a set top box and a mobile communication system" for the reasons that follow. Hrg. Tr. at 25:14-17. First, the specification describes that a mobile set top box combines the functionality of a mobile communication system and a set top box. '223 Patent at 2:53–57; *see also* '223 Patent at 3:14–20; 3:65–4:1; 4:21–27; 6:3–24; 6:25-28; and Figs. 2–5. Second, MV3's construction does not exclude any embodiments. *See Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010) (quoting *Vitronics Corp. v. Conceptronic Inc.*, 90 F.3d 1576, 1583–84 (Fed. Cir. 1996)) ("A claim construction that excludes the preferred embodiment 'is rarely, if ever, correct and would require highly persuasive evidentiary support.'").

B. "determining the native display resolution of the second size format of the display device based on a response resulting from the query of the display device" (Claims 1 and 30)

MV3's Proposed Construction	Roku's Proposed Construction
No construction necessary. Alternatively, the following is provided in the event the Court determines a construction is necessary: "determining the maximal allowed display resolution of the second size format of the display device based on a response resulting from a request for information from the display device"	"using the particular data provided by the display device to calculate the number of physical horizontal and vertical pixels in the screen of the display device"

The parties have three disputes for this term. First, the parties dispute both how the mobile set top box "determin[es] the native display resolution of the second size format of the display device." Roku contends that the mobile set top box determines the native display resolution by "calculat[ing] the number of physical horizontal and vertical pixels in the screen of the display device." ECF No. 68 at 25. MV3 contends there is no support in the specification or prosecution history to support narrowing the construction of "determining" to "calculating," and proposes "determining the maximal allowed display resolution of the second size format of the display device." ECF No. 73 at 20–21. Second, Roku contends that the proposed construction for "native display resolution" should be "the number of physical and vertical pixels in the screen of the display device." ECF No. 68 at 25. MV3 contends that Roku's construction improperly narrows the meaning of "native display resolution" by excluding information such as whether the display is interlaced or progressive. ECF No. 64 at 12–13. Third, Roku's proposed construction for "based on a response resulting from the query of the display device" is "using the particular data provided by the display device." ECF No. 68 at 26–28. MV3 contends that

Roku's proposed construction improperly narrows the claims and is also unhelpful. ECF 77 at 13.

The Court addresses each of these disputes in turn. First, the Court agrees with MV3's reasoning and construction for the "determining" step. The plain meaning of "determining" does not necessarily require "calculating." For example, rather than perform a calculation to determine the native display resolution, the display device may simply provide the native display resolution, thus obviating the need to perform a calculation. In fact, it may not be possible to "calculate" some aspects of the display's resolution, *e.g.*, whether the display is interlaced or progressive. Furthermore, Roku has not identified any support in the specification or prosecution history which shows "a clear disavowal of claim scope" that justifies construing "determining" with the narrower "calculating." *Thorner*, 669 F.3d at 1366. Roku cites aspects of Claim 1 in support of its contention that the specification requires using a "processor" for calculation. ECF No. 72 at 23. But the "processor" described in the claims is for up-conversions, one step of which is "determining the native display resolution." '223 Patent at 8:26–59. In other words, the claims do not clearly require that the "determining" is limited to "calculating."

Second, the Court agrees with MV3's reasoning and construction for "native display resolution." In particular, a POSITA would understand that "native display resolution" is not limited to the number of horizontal and vertical pixels, but also includes whether the display is interlaced or progressive, and the areal density of pixels. *Id.* at 2:44–49 (describing "1080p" as the "native resolution for a target display"); *see also Biscotti Inc. v. Microsoft Corp.*, 2:13-cv-01015-JRG-RSP, 2016 WL 6611487, at *10–11 (E.D. Tex. Nov. 9, 2016). Roku has not

identified any support in the specification or prosecution history which shows "a clear disavowal of claim scope." *Thorner*, 669 F.3d at 1366.

Third, the Court agrees with MV3's reasoning and construction for "based on a response resulting from the query of the display device." Roku's proposed construction appears to potentially narrow the scope of the claim language by reciting "particular data" and "provided by." Roku's use of "particular data" instead of "response" is narrower because the former appears to be a subset of the latter. The use of "particular data" in Roku's proposed construction, which comes from a dictionary definition, also suffers from the infirmity of being both ambiguous as to what "particular" data will meet the claim limitation and unsupported by the specification. Similarly, Roku's use of "provided by" instead of "a response resulting from the query" may be narrower because the plain meaning of "resulting" allows for both direct and indirect responses while "provided by" may not allow for indirect responses. Roku has not identified any support in the specification or prosecution history which shows "a clear disavowal of claim scope." *Thorner*, 669 F.3d at 1366.

The Court agrees with MV3's argument that "Roku's new restriction requiring the 'querying of the display device' limitation to be completed before the 'determining the native display resolution of the second size format of the display device' limitation should be rejected." ECF No. 77 at 13. But the Court disagrees with MV3's argument that there is "no evidence" that the "determining" step refers back to the "querying" step. *Id.* Rather, the evidence is in the claim itself. More specifically, because the "determining" step is "based on a response resulting from the query of the display device," "as a matter of logic or grammar," the "querying" step must begin before the "determining" step begins. *Altiris*, 318 F. 3d at 1369-70; '223 Patent at 8:43–46. But because there is nothing in the claim language or specification that expressly

requires that the "querying" step be completed before the "determining" step begins, the Court does not hold that the "querying" step must be completed before the "determining" step begins. The "determining" step may occur concurrently with the "querying" step if, for example, the response for the querying step is segmented into multiple blocks wherein one of the earlier blocks contains the information required for the "determining" step. *See, e.g.*, Hrg. Tr. 47:15–48:6. Alternatively, the "determining" step may begin after the completion of the "querying" step if, for example, the response for the querying step is sent in a single block.

Therefore, for the reasons stated above, the Court construes "determining the native display resolution of the second size format of the display device based on a response resulting from the query of the display device" as "determining the maximal allowed display resolution of the second size format of the display device based on a response resulting from a request for information from the display device." But, as explained above, the Court finds that the "querying the display device" limitation must begin before the "determining the native display resolution of the second size format of the display device based on a response resulting from the query of the display device" limitation begins.

C. "multicast broadcasts" (Claims 1, 30, and 32)

MV3's Proposed Construction	Roku's Proposed Construction
No construction necessary. Alternatively, the following is provided in the event the Court determines a construction is necessary: "communication to more than one recipient"	"transmitting simultaneously from a single sender to more than one recipient"

The Court determines that "multicast broadcasts" be given its plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it for the reasons that follow. Hrg. Tr. at 52:23–24. First, for this term, neither of the exceptions to the general rule that plain and ordinary

meaning applies here. *Thorner*, 669 F.3d at 1365. Second, this term is not a technical term for which a construction would help the jury understand the meaning of the term. *Kroy IP Holdings*, 2014 WL 3735222, at *2. Third, Roku's proposed construction incorrectly limits the number of senders to a single sender. More specifically, the term "multicast" only describes that there is more than one recipient and not necessarily that there is also only a single sender. Fourth, Roku's proposed construction introduces some ambiguity by using the word "simultaneously" when that word does not appear in the specification. In this case, using "simultaneously" in Roku's construction does not clarify the scope of the claim, but rather adds ambiguity into it by forcing the jury to whether sending within five milliseconds, five nanoseconds, *etc.* is "simultaneous." Hrg. Tr. 34:8–14. As such, not only is "simultaneous" potentially indefinite, it is unhelpful to a jury. *Kroy IP Holdings*, 2014 WL 3735222, at *2.

SIGNED this 2nd day of October, 2019.

ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE