

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

NEXSTEP, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 19-1031-RGA-SRF
	)	
COMCAST CABLE	)	
COMMUNICATIONS, LLC,	)	
	)	
Defendant.	)	

**REPORT AND RECOMMENDATION**

**I. INTRODUCTION**

In this patent infringement action filed by plaintiff NexStep, Inc. (“Plaintiff” or “NexStep”) against defendant Comcast Cable Communications, LLC (“Defendant” or “Comcast”), Plaintiff alleges infringement of United States Patent Nos. 7,444,130 (“the ’130 patent”), 7,542,753 (“the ’753 patent”), 7,697,669 (“the ’669 patent”), 7,907,710 (“the ’710 patent”), 8,280,009 (“the ’009 patent”), 8,494,132 (“the ’132 patent”), 8,885,802 (“the ’802 patent”), 9,614,964 (“the ’964 patent”), and 9,866,697 (“the ’697 patent”) (collectively, the “Asserted Patents”), which are directed to personal computing devices and services to control, combine, and integrate telephone and video services.<sup>1</sup> (D.I. 1 at ¶ 8) This decision sets forth the court’s recommendations of constructions for the disputed claim terms discussed in the briefing and at the *Markman* hearing held on September 15, 2020.

---

<sup>1</sup> The briefing and other filings made in support of the parties’ claim construction positions are found at D.I. 82 and D.I. 83.

## II. BACKGROUND

The United States Patent and Trademark Office (“USPTO”) issued the Asserted Patents to Dr. Robert Stepanian, the founder of NexStep, between 2008 and 2018. (D.I. 1 at ¶¶ 8, 10-18) The Asserted Patents recite systems and methods for controlling and integrating a variety of devices, “such as TVs, set-top boxes, DVRs, VoIP (telephone) systems, and home devices (e.g., security cameras, electrical outlets, and thermostats) using a hand-held device.” (*Id.* at ¶ 19) The Asserted Patents claim priority to an original provisional application filed on August 19, 2005. (D.I. 82 at 4) The ’130, ’753, ’669, ’710, ’132, and ’802 patents share a common specification and are directed to simple, inexpensive remote controls that operate in conjunction with multi-media consoles. (’130 patent, col. 1:26-32) The ’009 and ’697 patents share a common specification and are directed to streamlining consumer access to customer support services for their devices. (’009 patent, col. 2:51-58) The ’964 patent also shares a common specification with the ’009 and ’697 patents. The ’964 patent is directed to improving the interconnection of consumer devices. (’964 patent, col. 2:25-56)

Defendant Comcast provides Internet, video, voice, and security services. (D.I. 1 at ¶ 24) In its complaint filed on June 3, 2019, NexStep alleges that Comcast’s modems, gateways, routers, set-top boxes, remote controls, home security sensors and video surveillance cameras, smartphone and tablet devices, and smartphone applications for controlling and integrating these devices infringe the Asserted Patents. (*Id.*) The complaint suggests that Comcast’s executive officers met with Dr. Stepanian in the summer of 2007 to discuss NexStep’s technology and, after rejecting the opportunity to work with NexStep on the development of Comcast’s technology, Comcast used the information gleaned from those meetings to develop its own infringing technology. (*Id.* at ¶¶ 20-23)

### III. LEGAL STANDARD

Construing the claims of a patent presents a question of law, although subsidiary fact finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370, 388-90 (1996)). “It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). “[T]here is no magic formula or catechism for conducting claim construction.” *Id.* at 1324. Instead, the court may attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.*

The words of the claims “are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312-13 (internal citations and quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted); *see also Eon Corp. IP Holdings v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016). Claim terms are typically used consistently throughout the patent, and “usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Phillips*, 415 F.3d at 1314 (observing that “[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . .”).

It is likewise true that “[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a

presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15 (internal citation omitted). This “presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003) (citing *Ecolab Inc. v. Paraclipse, Inc.*, 285 F.3d 1362, 1375 (Fed. Cir. 2002)).

Other intrinsic evidence, including the patent specification, “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[T]he 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.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). It bears emphasis that “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted). The specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

In addition to the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 980. The prosecution history, which is also “intrinsic evidence,” “consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.”

*Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

A court also may rely on “extrinsic evidence,” which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries “endeavor to collect the accepted meanings of terms used in various fields of science and technology.” *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* (“[C]onclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”). Overall, while extrinsic evidence may be useful to the court, it is less reliable than intrinsic evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1318-19. Ultimately, “[t]he 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.” *Renishaw PLC v. Marposs Societa’ Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

**IV. CONSTRUCTION OF DISPUTED TERMS**

**A. “Palm held remote” (’130 patent, claims 10, 11, 15)**

<b>Plaintiff</b>	<b>Defendant</b>	<b>Court</b>
<p>Plain and ordinary meaning; No construction required.</p> <p>The plain and ordinary meaning is a hand-held remote control device that meets the other claim requirements</p>	<p>“a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP”</p>	<p>“a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP”</p>

I recommend that the court adopt Defendant’s proposed construction and construe the term “palm held remote” to mean “a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP.” Defendant’s proposed construction is consistent with the claim language, the specification, and the prosecution history of the ’130 patent.

The focus of the parties’ dispute is whether the term “palm held remote” should be construed to exclude smartphones. Plaintiff argues that Defendant’s proposed construction, which would exclude smartphones from the definition of “palm held remote,” is inconsistent with the intrinsic record, it imports non-limiting examples from the specification into the claims, and it excludes embodiments disclosed in the specification. (D.I. 82 at 13-15) In response, Defendant contends that the applicant unambiguously distinguished the invention from a smartphone during prosecution of the ’130 patent. (*Id.* at 16-18) Moreover, Defendant alleges that the specification of the ’130 patent confirms that the tethered “palm held remote” in the claims excludes untethered smartphones, which are complex and expensive devices by comparison. (*Id.* at 19-21)

The claim language and specification of the '130 patent do not support a construction of “palm held remote” that would include smartphones. The specification of the '130 patent acknowledges that, while “[t]he remote may resemble a handheld personal computer (HPC), a palm-held personal computer (PPC or PDA) or a smartphone,” it is distinguishable from those devices because it “has a low cost and feature set supported by the console that is novel in the consumer electronics market.” ('130 patent, col. 1:32-36; *see also* D.I. 83, Ex. C-8 at ¶ 39) The specification explains that the palm held remote is reliant on a tethered console for processing power:

A tethered digital butler produces a low cost, palm-held remote with a novel combination of features that are implemented by logic and resources of the console, connected wirelessly to the palm-held remote. Tethering the palm-held device, so that it depends on logic and resources of the console, runs against the trends and teachings of the consumer electronics industry and particularly against the trend toward more powerful smartphones.

('130 patent, col. 2:49-56)

The '130 patent differentiates smartphones as devices that are “untethered, packing many features into a small form factor, not requiring a console.” ('130 patent, col. 1:53-54) By describing “[t]he present invention” as a “tethered digital butler,” the applicant expressly distinguishes the invention from untethered smartphones operating independent from a console. ('130 patent, cols. 1:27-36; 2:3-12) Such characterizations of the “present invention” serve to notify the public of the scope of the invention, in this case limiting the palm held remote to a tethered device reliant on a console. *See Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (holding that “[t]he public is entitled to take the patentee at his word and the word was that the invention is a fuel filter” where the specification repeatedly referenced “this invention” or “the present invention” as relating to a fuel filter). By describing

smartphones as untethered devices operating independent from a console, the specification supports a construction of “palm held remote” that excludes smartphones.

Independent claim 10 of the '130 patent confirms that the palm held remote depends on the console component for processing power. ('130 patent, col. 22:42-23:13) Specifically, claim 10 recites a palm held remote having a speaker, a microphone, a display, a cursor control and trigger, a keypad, and a limited range radio for communication with the console. (*Id.*, col. 22:46-58) Complex processing functions are reserved for the console component, which has a media card reader or hard drive, a network port, and logic and resources capable of decoding VoIP or digital content from the media card reader or hard drive.<sup>2</sup> (*Id.*, col. 22:59-23:6) Claim 10 states that “the palm-held remote allows a user to select among and use” the features of the console component “without performing the decoding of VoIP or digital content from the media card reader or hard drive [p]erformed by the resources of the console component.” (*Id.*, col. 23:7-13)

Plaintiff contends that Defendant’s proposed construction would read certain embodiments out of the scope of the '130 patent. (D.I. 82 at 14-15) Plaintiff highlights Figure 7

---

<sup>2</sup> Plaintiff contends that Defendant’s proposed construction would violate the doctrine of claim differentiation because some, but not all, claims recite that the master device must process at least one audio stream for the remote. (D.I. 82 at 25) According to Plaintiff, claims not reciting this limitation were not intended to be so limited. (*Id.*) But Plaintiff has not identified a claim in which the remote control does not depend on the master device or console to process an audio stream. To the contrary, Defendant has shown that all claims recite the console or master device performing audio or video processing. For example, claim 1 of the '753 patent states that the remote control “depends on the master device to process at least one audio stream. ('753 patent, col. 21:23-27) Claim 10 of the '130 patent recites that the console component is adapted to “decode VoIP to a remote control device format and decode digital content from the media card reader or hard drive.” ('130 patent, cols. 22:59-23:3) Claim 11 of the '669 patent recites “the remote control depends on the master device to transcode input from and output to the slaved microphone and an audio output between VoIP and the remote control device format.” ('669 patent, col. 22:63-66) Claim 1 of the '710 patent likewise recites “the remote control depends on the master device to transcode audio output from VoIP to the remote control device format.” ('710 patent, col. 21:6-8)



of the '130 patent, which discloses an XScale processor having a camera module and/or memory card reader. ('130 patent, col. 15:22-25) But the specification discloses the XScale processor as a hardware component, without identifying any processing or decoding of complex data streams performed by the remote itself. (*Id.*, col. 15:22-59) Plaintiff further relies on the disclosure of a fifth embodiment in the specification to suggest that the palm held remote may have the processing power of a smartphone:

In a fifth embodiment, the remote is emphasized. One aspect of the remote is to provide a complete I/O platform in the palm of the user's hand. Features adaptable to VoIP and/or video phone operation, such as a microphone, can be used for other purposes, such as dictation, note taking, voice messaging, listening to music or remote viewing video. To support the high demands of streaming video, a broader communications channel, such as Bluetooth version 2 or later or 802.11n, and a more powerful processor are included. The remote may function in tandem with a console, PC or set top cable or satellite box. It also could be configured to control other consumer electronics device such as a TV, IP-TV, home theater system, component stereo, digital video recorder, DVD player or recorder, VCR, etc.

('130 patent, col. 3:51-64) Although this embodiment states that the palm held remote has “[f]eatures *adaptable* to VoIP and/or video phone operation,” such as a microphone, which can also be used for purposes such as dictation or voice messaging, it does not suggest that the palm held remote itself decodes VoIP or IPTV signals. (*Id.*, col. 3:53-56) In this regard, the description of the fifth embodiment does not depart from the balance of the specification or independent claims 1, 6, 10, 17, and 34, which specify that the palm held remote relies on a console component or master device to decode VoIP signals. (*Id.*, cols. 20:59-26:34)

Defendant argues that Plaintiff disavowed a construction of “palm held remote” that would include smartphones during prosecution of the '130 patent. (D.I. 82 at 16-19) “[T]he standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature.” *Poly-Am., L.P. v. API Indus., Inc.*,

839 F.3d 1131, 1136 (Fed. Cir. 2016); *see Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (holding that the doctrine of prosecution disclaimer does not extend to situations where the supposed disavowal of claim scope is ambiguous). The prosecution history of the '130 patent reflects an express disavowal of a remote control device capable of processing or decoding IPTV or VoIP signals. (*See, e.g.*, D.I. 84, Ex. B-50 at 7; Ex. B-2 at 12; Ex. B-4 at 12-14) In this regard, the prosecution history provides further support for Defendant's proposed construction of "palm held remote."

During prosecution of U.S. Patent No. 7,389,103 ("the '103 patent"), to which the '130 patent claims priority, the applicant overcame a prior art rejection based on the McQuaide reference, which disclosed a remote control device capable of receiving Internet Protocol television and telephony signals. (D.I. 83, Ex. C-2 at Abstract) The applicant distinguished the McQuaide reference by contrasting the complex processing power of McQuaide's IP Smart Phone with the simple, inexpensive remote control of the '103 patent that relies on a console for complex processing:

In the marketplace, which has a role in determining what is non-obvious that was reconfirmed by *KSR*, a remote control at a low price point has entirely different functionality than a McQuaide's IP Smart Phone. The remote claims in the companion case include positive limitations that specify a data feed which is unavailable in the exchange between McQuaide's IP Smart Phone and the simple IP router to which it connects. The form of data feed and collection of features claimed have been discovered to create new functionality at a price point which will be attractive in the marketplace.

(D.I. 84, Ex. B-50 at 7) In a December 18, 2007 Amendment and Response to the Examiner's Office Action during prosecution of the '130 patent, the applicant amended the claims to distinguish the McQuaide reference by "address[ing] the interface with the remote, which dramatically impacts the complexity and cost of the remote." (D.I. 84, Ex. B-2 at 12) Unlike the McQuaide reference, which claims an expensive "handheld device capab[le] of decoding IPTV

and IP Phone signals” through a direct connection to an IP router, the applicant explained that the palm held remote claimed in the ’130 patent “interacts with something more sophisticated than a simple router, such as a set top box, a TV or a media center.” (*Id.*) Consequently, the palm held remote recited in the ’130 patent “is much simpler than McQuaide's complex handheld device” and “could be produced at one-tenth or less the cost of building McQuaide's handheld.” (*Id.*)

In the May 23, 2008 Amendment and Response to the Examiner’s Final Office Action, the applicant distinguished the prior art McQuaide reference by explaining that the claimed Portable Set Top Box of McQuaide “interact[s] directly with complex audio and video sources that require extensive decoding logic,” an approach which “is very expensive and inappropriate for use as a common remote control.” (D.I. 84, Ex. B-4 at 12) In contrast, the applicant expressly disavowed a palm held remote having “elaborate decoders for IPTV and IP Phone built in,” and instead explained that the invention connects to a set top box or similar device which “performs the extensive decoding required for IPTV, IP Phone, Flash Media and similar signals” before relaying a simplified signal to the remote. (*Id.* at 13) The applicant consistently characterized the invention in terms of its simplicity and low cost resulting from its reliance on a master device for complex processing:

Our Remote I/O Platform relies on a set top box, a home media player or another relatively expensive master system that already has extensive computer power to do the heavy lifting of decoding IPTV, IP phone, and similar highly encoded media sources. As a result, the Remote I/O Platform becomes something entirely different from a Portable Set Top Box. . . . The availability of a simplified, two-way data stream with slaved inputs and outputs produces new functionality in the consumer’s living room. Tethering the palm-held device, so that it depends on logic and resources of the console, runs against the trends and teachings of the consumer electronics industry and particularly against the trend toward more powerful smart phones.

(*Id.* at 14) The examiner subsequently issued a notice of allowance “[b]ecause McQuaide does not disclose that the remote control depends on the master device to transcode input from and output to the slaved microphone and audio output between VoIP and the remote control format.” (D.I. 84, Ex. B-6 at 2) Thus, the applicant’s express disavowal of a palm held device capable of decoding IPTV, VoIP, or other complex signals led to the examiner’s allowance of the ’130 patent over McQuaide.

Plaintiff argues that the court should reject Defendant’s proposed construction because it incorporates a negative limitation by specifying that the claimed palm held remote “cannot decode complex data streams, such as IPTV or VoIP.” (9/15/2020 Tr. at 13:22-25) But the Federal Circuit has held that a negative limitation may be included in the construction of a disputed claim term where, as here, the negative limitation is supported by an “express disclaimer or independent lexicography in the written description.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). More recently, the Federal Circuit upheld a district court’s construction of a claim term having a negative limitation even in the absence of an express disavowal during prosecution or independent lexicography in the specification. *See Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d 1367, 1375 (Fed. Cir. 2020) (upholding a construction of “passageway” that does not “encompass a receptacle that [has] no bottom or utilized a broad-thin, mesh,” without a finding of express disavowal or lexicography). The disavowal of scope in the prosecution history of the ’130 patent, viewed in combination with the written description, are more than sufficient to support Defendant’s proposed negative limitation under Federal Circuit precedent.

The Federal Circuit has cautioned against construing claim terms in the abstract, explaining that “a term’s ordinary meaning must be considered in the context of all the intrinsic

evidence, including the claims, specification, and prosecution history.” *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1094 (Fed. Cir. 2013). Here, the claims of the ’130 patent disclose a palm held remote dependent on a master device or console for complex processing, and the specification expressly distinguishes the claimed palm held device from a smartphone based on its lower price point and limited processing capabilities. Consistent with the written description, the applicant repeatedly emphasized the invention’s simplicity and dependence on a master device as compared to the complex processing capabilities of a smartphone during prosecution. *See Fenner Investments, Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1322-23 (Fed. Cir. 2015) (“Any explanation, elaboration, or qualification presented by the inventor during patent examination is relevant, for the role of claim construction is to ‘capture the scope of the actual invention’ that is disclosed, described, and patented.”)(quoting *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1305 (Fed. Cir. 2011)). For these reasons, I recommend that the court adopt Defendant’s proposed construction of the term “palm held remote.”

**B. “Remote control device” (’753 patent, claims 1, 19; ’669 patent, claims 11, 12, 13; ’710 patent, claims 1, 2, 4, 12, 16; ’132 patent, claims 1, 4, 11, 16, 19; ’802 patent, claims 1, 2)**

Plaintiff	Defendant	Court
Plain and ordinary meaning; No construction required.  The plain and ordinary meaning is a device for remote control of other devices that meets the other claim requirements.	“a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP”	“a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP”

I recommend that the court adopt Defendant’s proposed construction and construe the term “remote control device” to mean “a simple handheld device that, in contrast to a

smartphone, cannot decode complex data streams, such as IPTV or VoIP.” The parties agree that the same arguments presented in connection with the term “palm held remote” apply equally to “remote control device.” (D.I. 82 at 31) In his declaration, Dr. Chatterjee confirmed “[a] POSITA would have understood that the Tether patent<sup>3</sup> terms “remote control device” and “palm-held remote” are used interchangeably and should be construed the same way.” (D.I. 83, Ex. C-8 at ¶ 36) The ’753, ’669, ’710, ’132, and ’802 patents share a specification with the ’130 patent, and the prosecution history of the ’130 patent further supports the court’s analysis of the common specification as explained at § IV.A, *supra*.

Plaintiff argues that Defendant’s proposed construction violates the doctrine of claim differentiation. By way of example, Plaintiff alleges that unasserted claim 14 of the ’753 patent and claim 1 of the ’802 patent recite a remote control dependent on a master device to process or transcode audio data, while other claims are silent on these particular limitations. (D.I. 82 at 30-31) Notably, Plaintiff does not identify any specific claims in the ’753 or ’802 patents which lack limitations rendering the remote control device dependent on a master device for the processing of audio or other complex data streams. (*Id.*)

For the reasons set forth herein and at § IV.A, *supra*, I recommend that the court construe “remote control device” in accordance with Defendant’s proposed construction as “a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP.”

---

<sup>3</sup> In its briefing, Defendant defines the ’130, ’753, ’669, ’710, ’132, and ’802 patents as the “tether patents,” grouping them in this fashion because they share a common specification and are directed to “tethered digital butlers,” that can operate only in conjunction with a console. (D.I. 82 at 5)

**C. “Control device” (’964 patent, claims 1, 11, 16, 21)**

Plaintiff	Defendant	Court
<p>Plain and ordinary meaning; No construction required.</p> <p>The plain and ordinary meaning is a device capable of controlling a controlled device.</p>	<p>“a simple apparatus, not a universal remote control or smart phone capable of acting as a universal remote control, for controlling a device”</p>	<p>“a simple apparatus, not a universal remote control or smart phone capable of acting as a universal remote control, for controlling a device”</p>

I recommend that the court adopt Defendant’s proposed construction and construe the term “control device” to mean “a simple apparatus, not a universal remote control or smart phone capable of acting as a universal remote control, for controlling a device.” Plaintiff represents that “[c]onstruction for ‘control device’ is parallel to that for ‘palm held remote’ and ‘remote control device,’ discussed above.” (D.I. 82 at 32) Defendant’s proposed construction is consistent with the specification and the prosecution history of the ’964 patent.

Plaintiff argues that the plain and ordinary meaning of “control device” should apply, which is broad enough in scope to include a smartphone or a universal remote control. (D.I. 82 at 32-33; D.I. 83, Ex. C-7 at ¶ 34) Specifically, Plaintiff alleges that “[t]he ’964 patent discloses an embodiment where the control device is a smart phone used to control a controllable device.” (D.I. 82 at 33) However, the cited embodiment states that “the *concierge device* may be a smart phone that runs a *concierge application*.” (*Id.*; ’964 patent, col. 10:50-55; D.I. 83, Ex. C-7 at ¶ 34) (emphasis added) The specification of the ’964 patent expressly distinguishes the term “concierge device” from “control device.” For example, the specification explains that the *concierge device* “can be configured to register, control and/or support” a consumer device, and “can manage on boarding of components . . . including home control devices.” (’964 patent, cols. 2:37-38; 2:51-56; 3:54-56) Plaintiff does not identify any disclosed embodiment in which a control device, as opposed to a *concierge device*, encompasses a smartphone. (*Cf.* ’964 patent,

col. 12:27-31) (“FIG. 8 depicts a concierge device with an integrated bridge and display. . . . The concierge device may be implemented in this configuration as an application running on a smart phone, tablet or similar device.”). Embodiments tying the concierge device to a smartphone do not advance Plaintiff’s argument that a control device may be a smartphone.

The portions of the ’964 patent specification describing the control device, as opposed to the concierge device, confirm that the control device is a simple device. For instance, the specification describes Fig. 12B as showing “an example of an alert that a new home control device, a switch is available for on-boarding.” (’964 patent, cols. 3:23-25, 13:51-52) The Summary of the Invention describes control devices and controllable devices as switches and lamps, respectively, consistent with other examples in the specification identifying a home control device as “a wireless switch (SW).” (*Id.*, cols. 2:50-56; 12:3-6)

Plaintiff does not point to any portion of the specification describing the control device as having the capabilities of a smartphone or a universal remote control. The portions of the specification relied upon by Plaintiff generally describe the control device as a programmable device with a display (’964 patent, col. 37:23-39), a device with input sensors, a display, menus, and control codes (*id.*, col. 42:19-27), a device capable of conducting a support call using a video camera (*id.*, col. 42:58-62), and a device capable of displaying advertisements (*id.*, col. 43:5-9). The specification does not characterize these features as features of a universal remote control or a smartphone.

Moreover, the applicant further limited the scope of the term by repeatedly disavowing a universal remote control from the scope of the term “control device” during prosecution of the ’964 patent in its efforts to overcome multiple rejections:

The distinction between a simple home control device and a universal remote control in these claims has not been given adequate consideration and patentable



weight. Our Figure 7, which we went over during our interview, illustrates a simple switch in contrast to a smart phone capable of acting as a universal remote control.

(D.I. 84, Ex. B-34 at 12; Ex. B-37 at 16) Consistent with disclosures made in the specification of the '964 patent, the applicant described the control device as a simple switch during prosecution to distinguish the invention from prior art references disclosing a universal remote control or smartphones. (D.I. 84, Ex. B-34 at 12-13; Ex. B-35 at 11 (“New claim 36 . . . further differentiates between our simple (SW) and Maymudes’ improved universal remote control” that can “control multiple different devices”)) The applicant similarly disclaimed the universal remote control disclosed in the Hayes prior art reference, representing that Hayes “includes only a universal remote control, not a control device at all.” (D.I. 84, Ex. B-39 at 17; *see also* D.I. 84, Ex. B-38 at 21 (explaining that Hayes “relates to a system and associated methods for controlling and operating a plurality of home appliances” using a universal remote control); Ex. B-39 at 11-12 (identifying no feature of the Hayes reference as equivalent to the claimed control device)). Because the applicant disavowed the inclusion of a universal remote control or smartphone within the scope of the term “control device” during prosecution of the '964 patent, the court may adopt the negative limitation excluding a universal remote control in Defendant’s proposed construction. *See Omega Eng’g*, 334 F.3d at 1323.

During the *Markman* hearing, Plaintiff presented a claim differentiation argument based on the recitation of the control device as a switch in certain dependent claims. (9/15/2020 Tr. at 63:9-15) But Defendant’s proposed construction does not limit the claimed control device to a switch. Defendant acknowledged that a simple switch is an example of a control device supported by the specification, without attempting to restrict the definition of “control device” to

a switch in its proposed construction. (*Id.* at 67:10-12) (“One example that is used frequently throughout the patent for the control device is a switch. . .”).

On this record, a person of ordinary skill would understand that the claimed control device is a simple device that does not encompass a universal remote control or smartphone.

**D. Concierge—Device (’009 patent, claims 1, 3, 6, 8, 11, 12, 13, 16, 20, 22, 27; ’697 patent, claims 1, 2, 3, 4, 7; ’964 patent, claims 1, 6, 11, 16, 21)**

Plaintiff	Defendant	Court
A device including functionality for the remote control of at least one consumer device and that meets the other claim requirements.	“A device with at least a microphone, a speaker, a function button or input sensor, a memory, and a wireless transceiver.”	A device including functionality for the remote control of at least one consumer device and that meets the other claim requirements.

I recommend that the court adopt Plaintiff’s proposed construction and construe the term “concierge device” to mean “[a] device including functionality for the remote control of at least one consumer device and that meets the other claim requirements.” Plaintiff’s proposed construction is consistent with the claim language of the ’009, ’697, and ’964 patents.

The parties dispute whether the five components included in Defendant’s proposed construction (namely, the microphone, speaker, function button or input sensor, memory, and wireless transceiver) are required features of the concierge device, or whether the intrinsic record supports a broader construction which would permit, but not require, these features in various configurations. The common specification of the ’009, ’697, and ’964 patents discloses that features of the claimed concierge device “can be combined in a variety of ways, depending on the configuration of the concierge device. In this disclosure, the concierge device is really a family of devices connecting to the cloud, as shown in the figures.” (’009 patent, col. 21:1-5)

Defendant points to multiple portions of the common specification describing the “simplest” concierge device as a device that includes the five components enumerated in Defendant’s proposed construction. For example, the specification of the ’009 patent explains that “[t]he simplest concierge device lacks a display or includes a minimal monochrome display. It need only have a microphone, speaker, one to a few function buttons or input sensors, a memory and at least one wireless transceiver.” (’009 patent, col. 8:32-35; *see also* col. 31:2-6) Consistent with this characterization, the specification goes on to describe a “low cost concierge device with minimal processing power, a microphone, a speaker, one to a few function buttons and a wireless transceiver.” (’009 patent, col. 14:62-65) The specification does not state whether different or more complex versions of the concierge device must also possess each of these basic features.

The claim language allows for an interpretation of “concierge device” that is not limited to the five features identified by Defendant. For instance, independent claim 21 of the ’964 patent discloses a concierge device receiving a dedication command without explicitly defining the mechanism by which that dedication command is received. (’964 patent, cols. 47:34-48:20) In dependent claim 24, the inventor specifies that the dedication command is received by a microphone: “The system of claim 21, wherein the dedication command is received from the user via a microphone on the handheld concierge device as an audible command.” (*Id.*, col. 48:29-31) In dependent claim 25, the inventor represents that the dedication command is received via a display screen, indicating that the display screen acts as a substitute for the microphone of dependent claim 24. (*Id.*, col. 48:32-34) Thus, the specification’s description of the components in the “simplest” concierge device does not necessarily mean that each of those components is also present in other, possibly more complex iterations of the concierge device.

Similarly, independent claim 16 of the '009 patent generically discloses “one or more outputs,” while dependent claim 18 discloses that the output is an audio menu and dependent claim 19 discloses that the output for displaying a menu must be a visual display, as opposed to an audio device such as a speaker. ('009 patent, cols. 43:43-44:8; 44:13-16) The specification clarifies that the speaker and the visual display in the dependent claims are claimed as alternative forms of output:

A concierge device with a speaker or other audio output can receive voice prompts for confirming registration of the new device and can accept single user actions in response to the prompts, such as button presses, menu selections or verbal responses to the verbal prompts. Alternatively, a concierge device with a display can receive visual prompts for confirming registration of the new device and can accept single user actions in response to the prompts, such as button presses, menu selections or verbal responses to the visual prompts.

('009 patent, col. 4:33-42) While the specification discloses that “[a] simple concierge device can include a microphone and speaker, without a display,” an alternative concierge device may include “a keyboard for input and display for output.” (*Id.*, col. 21:5-15)

The intrinsic record contains insufficient support for Defendant’s proposed construction in the absence of claim language or express lexicography requiring that all concierge devices contain the five components identified in the “simplest” concierge device. Even if all embodiments in the common specification disclose the five limitations identified in Defendant’s proposed construction, those embodiments are not controlling where, as here, “[t]he claim language of the asserted claims . . . is not so limited.” *Intuitive Surgical, Inc. v. Auris Health, Inc.*, C.A. No. 18-1359-MN, 2019 WL 6840327, at \*5 (D. Del. Dec. 16, 2019) (citing *Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed. Cir. 2012) (“It is ... not enough that the only embodiments, or all of the embodiments, contain a particular limitation to limit a claim term beyond its ordinary meaning.”)).

**E. VoIP ('130 patent, claim 10; '753 patent, claim 1; '669 patent, claim 11; '710 patent, claim 1; '132 patent, claim 1; '802 patent, claims 1 and 7)**

Plaintiff	Defendant	Court
A protocol for sending audio data over a packet-switched network, such as the Internet.	“protocols and data formats for transmitting voice conversations over Internet Protocol”	Protocols and data formats for transmitting voice conversations over a packet-switched network, such as the Internet.

I recommend that the court adopt a hybrid of the parties’ proposed constructions and construe “VoIP” to mean “protocols and data formats for transmitting voice conversations over a packet-switched network, such as the Internet.” During the *Markman* hearing, the parties agreed that the term “VoIP” is no longer understood to be limited to the original Internet Protocol. (9/15/2020 Tr. at 98:9-23; 106:5-16) The parties further agreed that this term is an industry standard term, and the patentee did not deviate from the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art in the specification. (*Id.* at 101:3-10; 102:7-103:8) To the extent that Defendant’s proposed construction limits the term to transmitting voice conversations, it is consistent with the plain and ordinary meaning of the term in accordance with the industry standard and the intrinsic record.

Evidence of the industry standard definition for VoIP supports Defendant’s proposed construction limiting the term to voice conversations or telephony. VoIP is defined in Newton’s Telecom Dictionary as “[t]he technology used to transmit voice conversations over a data network,” and in the Dictionary of Computer and Internet Terms as “the transmission of voice telephone conversations through the Internet or through IP networks.” (D.I. 83, Exs. C-4 at 918, C-5 at 549) Plaintiff’s evidence in support of a broader definition in the industry that would encompass all audio data is limited to the expert declaration of Dr. Selker. (9/15/2020 Tr. at

101:12-15) But the underlying sources relied upon by Dr. Selker in drafting his declaration support Defendant's proposal that the term refers to voice communications:

VoIP is a category of technologies that route real-time voice conversations over the internet. VoIP can be used to describe everything from a computer-to-computer voice conversation, to a call between an Internet-connected computer and a standard telephone, to a long-distance call between two ordinary telephones where the long distance provider routes the calls over the Internet.

(D.I. 83, Ex. C-7 at Ex. 2 at 445) Because the term "VoIP" is an industry standard term, and because the extrinsic evidence uniformly defines the term in the context of voice communications, I recommend that the court adopt Defendant's proposed construction in this regard.

Plaintiff contends that the proper construction of VoIP should not be limited to voice conversations because it can include a wide range of audio content. (9/15/2020 Tr. at 100:8-21; D.I. 83, Ex. C-7 at ¶ 42) Plaintiff relies on an excerpt of the '669 patent specification, which states that "[f]eatures adaptable to VoIP and/or Video phone operation, such as a microphone, can be used for other purposes. Such as dictation, note taking, Voice messaging, listening to music or remote viewing video. ('669 patent, col. 3:53-56) But, as Defendant's expert Dr. Chatterjee explained, "[t]he 'features' referred to are simply hardware components (e.g., microphone, speaker, display, etc.) that the specification says can also be used for things in addition to VoIP. Thus, this statement in the Tether patents about 'features' does not suggest a definition of VoIP that strays from its industry-standard." (D.I. 83, Ex. C-9 at ¶ 56)

**F. Master Device ('753 patent, claims 1, 19; '669 patent, claims 11, 12, 13; '710 patent, claims 1, 2, 4, 12, 16; '802 patent, claims 1, 2, 7)**

Plaintiff	Defendant	Court
<p>Plain and ordinary meaning; No construction required.</p> <p>The plain and ordinary meaning is a device that satisfies the other claim requirements for controlling functionality of the remote control device.</p>	<p>“a console, i.e., a set top box, a TV, media center or any similar consumer electronics”</p>	<p>Plain and ordinary meaning; No construction required.</p> <p>The plain and ordinary meaning is a device that satisfies the other claim requirements for controlling functionality of the remote control device.</p>

I recommend that the court adopt Plaintiff’s proposal and construe the term “master device” in accordance with its plain and ordinary meaning as a device that satisfies the other claim requirements for controlling functionality of the remote control device. The term “master device” appears only in the claims of the ’753, ’669, ’710, and ’802 patents, and not in the specification. Defendant does not dispute Plaintiff’s assertion that the term “master device” has a plain and ordinary meaning to a person of ordinary skill in the art. (9/15/2020 Tr. at 123:3-9) The plain and ordinary meaning therefore forms the basis for the court’s construction.

The parties dispute whether the terms “master device” and “console” are used interchangeably in the patents. But the claims of the ’753, ’669, ’710, or ’802 patents do not restrict the scope of the term “master device” to the scope of the term “console,” and the specification is silent on the meaning of the term “master device.” As a result, the focus of the parties’ dispute rests on the prosecution history of the parent ’130 patent. In the May 23, 2008 Amendment and Response to Final Office Action, the applicant addressed the term “master device” as follows: “Pulse code modulation decoding by the remote is described in [0075] lines 7-11, while reliance on the master device to decode IPTV, MPEG-2, MPEG-4 and DVD playback is described at [0015] and [0100], lines 23 to 24. Also, compare [0099], line 20 with

[0110], line 16.” (D.I. 84, Ex. B-4 at 15) The citations refer back to portions of the specification discussing the logic and resources of the console which performs decoding functions for the remote. (’130 patent, cols. 2:49-56, 18:50-58) The portions of the specification relied upon by the applicant to support the term “master device” do not include any discussion of the console as a consumer electronics device, and the statement made during prosecution does not amount to a clear and unmistakable disavowal of scope limiting the term “master device” to the same scope as “console.” Instead, the statement made during prosecution indicates that the master device is similar to the console to the extent that it controls the functionality of the slaved device or remote.

Defendant alleges that, if “master device” is construed to have a broader scope than “console,” the claims would be rendered invalid under § 112. (D.I. 82 at 66-67; 9/15/2020 Tr. at 119:23-120:5) Although a patent claim should generally be construed to preserve its validity, the court “may not judicially rewrite the claim to do so.” *Microchip Tech., Inc. v. Scenix Semiconductor, Inc.*, 250 F.3d 759; 2000 WL 945308, at \*5 (Fed. Cir. 2000) (citing *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999)). Plaintiff has not addressed the substance of Defendant’s § 112 arguments. (9/15/2020 Tr. at 119:23-24) On this record and at this stage of the proceedings, the court renders no opinion on the substance of Defendant’s arguments under § 112. *See Microchip*, 2000 WL 945308, at \*5.



## V. CONCLUSION

For the reasons set forth above, I recommend that the court construe disputed terms as follows:

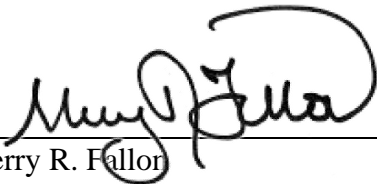
<b>Claim Term</b>	<b>Recommended Construction</b>
“Palm held remote” (’130 patent, claims 10, 11, 15)	a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP
“Remote control device” (’753 patent, claims 1, 19; ’669 patent, claims 11, 12, 13; ’710 patent, claims 1, 2, 4, 12, 16; ’132 patent, claims 1, 4, 11, 16, 19; ’802 patent, claims 1, 2)	a simple handheld device that, in contrast to a smartphone, cannot decode complex data streams, such as IPTV or VoIP
“Control device” (’964 patent, claims 1, 11, 16, 21)	a simple apparatus, not a universal remote control or smart phone capable of acting as a universal remote control, for controlling a device
Concierge—Device (’009 patent, claims 1, 3, 6, 8, 11, 12, 13, 16, 20, 22, 27; ’697 patent, claims 1, 2, 3, 4, 7; ’964 patent, claims 1, 6, 11, 16, 21)	A device including functionality for the remote control of at least one consumer device and that meets the other claim requirements.
VoIP (’130 patent, claim 10; ’753 patent, claim 1; ’669 patent, claim 11; ’710 patent, claim 1; ’132 patent, claim 1; ’802 patent, claims 1, 7)	Protocols and data formats for transmitting voice conversations over a packet-switched network, such as the Internet.
Master Device (’753 patent, claims 1, 19; ’669 patent, claims 11, 12, 13; ’710 patent, claims 1, 2, 4, 12, 16; ’802 patent, claims 1, 2, 7)	Plain and ordinary meaning; No construction required.  The plain and ordinary meaning is a device that satisfies the other claim requirements for controlling functionality of the remote control device.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The objections and responses to the objections are limited to ten (10) pages each. The failure of a party to object to legal conclusions may result in the loss of the right

to de novo review in the District Court. *See Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the court's Standing Order For Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the court's website, <http://www.ded.uscourts.gov>.

Dated: October 30, 2020



---

Sherry R. Fallon  
UNITED STATES MAGISTRATE JUDGE