

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

**CERTAIN PRODUCTS CONTAINING
INTERACTIVE PROGRAM GUIDE AND
PARENTAL CONTROLS TECHNOLOGY**

Inv. No. 337-TA-820

**ORDER NO. 35: CONSTRUING THE TERMS OF THE ASSERTED CLAIMS OF
THE PATENTS AT ISSUE**

(September 7, 2012)

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	IN GENERAL.....	2
III.	RELEVANT LAW	2
IV.	LEVEL OF ORDINARY SKILL IN THE ART	5
V.	THE '993 PATENT	7
A.	Overview.....	7
B.	Agreed-Upon and Disputed Claim Terms	9
1.	Construction of Agreed-Upon Claim Terms.....	9
a)	“user selected program content rating criteria”	9
b)	“plurality of user selected program blocking criteria”	10
2.	Construction of Disputed Claim Terms	10
a)	“override/overriding . . . until the system is shut off/until the shutting off of a system”	10
b)	“filter”	13
c)	“means for overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off”	15
d)	“means for blocking the means for supplying from supplying video signals of television programs that meet one or more user selected program content rating criteria to the video display”	19
e)	“means for overriding further comprises means for overriding the blocking of the display of television programs that meet the user selected program content rating criteria if a user enters a predetermined code”	19
f)	“means for overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off”	19
g)	“means for supplying selective video signals to a video display”	21
h)	“means for blocking the means for supplying from supplying video signals to the video display of television programs that meet one or more of a plurality of user selected program blocking criteria”	21

VI.	THE '523 PATENT	22
A.	Overview.....	22
B.	Construction of Disputed Claim Terms	24
1.	“specific content ratings”	24
2.	“overall program ratings”	26
3.	“specific program content indications”	27
4.	“means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input”	27
5.	“tiles”	27
6.	“either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or columns of tiles correspond to specific program content indications”	27
VII.	THE '643 PATENT	28
A.	Overview.....	28
B.	Agreed-Upon and Disputed Claim Terms	30
1.	Construction of Agreed-Upon Claim Term	30
a)	“video-on-demand program”	30
2.	Construction of Disputed Claim Terms	30
a)	“means for displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing”	30
b)	“means for indicating that a video clip preview is available for a video-on-demand program that is associated with a video-on-demand program listing”	38
c)	“means for allowing a viewer to select to view the video clip preview from the program guide display”	38
d)	“means for displaying the video clip preview on the viewer television equipment”	38
e)	“means for displaying an ordering display screen after the video clip preview of the video-on-demand program is displayed, wherein the ordering display screen provides the viewer with the opportunity to select an ordering option to order the video-on-demand program”	40
f)	“further comprising means for displaying a requested video clip preview in a video window”	43
g)	“further comprising means for displaying a requested video clip preview in a full screen video window”	45
h)	“interactive television video-on-demand program guide system”	47
i)	“video-on-demand program listing”	50
j)	“a video clip preview is available for a video-on-demand program that is associated with a video-on-demand program listing”	52

k)	“a program guide display”	54
l)	“main display screen”	57
m)	“icon”	59

I. INTRODUCTION

This Investigation was instituted by the Commission on December 21, 2011 to determine whether certain products containing interactive program guide and parental controls technology infringe U.S. Patent Nos. 7,493,643 (the “’643 patent”), RE41,993 (the “’993 patent”), and 6,701,523 (the “’523 patent”).¹ See 76 Fed. Reg. 79,214-215 (Dec. 21, 2011). The named respondent is VIZIO, Inc. (“Vizio”).

Pursuant to Ground Rule 5A, a *Markman* hearing was held April 5, 2012 regarding the interpretation of certain terms of the asserted claims of the patents at issue, namely:

- Claims 1, 3, 4, 7–10, and 13–16 of the ’643 patent;
- Claims 18–21, 23–25, 30, 31, 38, 39, 41, 43, 44, 49, 56, 57, 59, 61, 62, and 67 of the ’993 patent; and
- Claims 1–5, 7, 8, and 10–12 of the ’523 patent.

Prior to the hearing, Complainants Rovi Corporation, Rovi Guides, Inc., United Properties, Inc., Gemstar Development Corporation, and Index Systems, Inc. (collectively, “Rovi”), and Vizio met and conferred in an effort to reduce the number of disputed claim terms to a minimum. The parties also filed initial and reply claim construction briefs, wherein each party offered its construction for the claim terms in dispute, along with support for its proposed interpretation. Prior to the hearing, the parties submitted a Joint Claim Construction Chart. Pursuant to Order No. 12, the parties were directed to submit an updated Joint Claim Construction Chart after the hearing. Rovi and Vizio, however, were unable to agree on the

¹ The patents-in-suit are owned by Rovi through its subsidiaries. (Compl. at ¶¶ 3, 31, 38, 44.)

chart, resulting in Vizio filing a separate updated claim construction chart concomitant with a renewed motion to strike Rovi's new claim construction.^{2, 3}

II. IN GENERAL

The claim terms construed in this Order are done so for the purposes of this Section 337 Investigation. Those terms not in dispute need not be construed. *See Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1323 (Fed. Cir. 2004) (noting that the administrative law judge need only construe disputed claim terms).

Hereafter, discovery and briefing in this Investigation shall be governed by this construction of the claim terms. **All** other claim terms shall be deemed undisputed and shall be interpreted by the undersigned in accordance with "their ordinary meaning as viewed by one of ordinary skill in the art." *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371 (Fed. Cir. 2003), *cert. denied*, 540 U.S. 1073 (2003).

III. RELEVANT LAW

"An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*) (internal citations omitted), *aff'd*,

² Vizio's renewed motion is hereby denied.

³ The claim terms discussed in detail in this Order were identified in the Joint Claim Construction Chart and the Updated Proposed Claim Construction Charts as being agreed upon or remaining in dispute. For convenience, the briefs and chart submitted by the parties are referred to hereafter as:

CMIB	Rovi's Initial <i>Markman</i> Brief
CMRB	Rovi's Reply <i>Markman</i> Brief
RMIB	Vizio's Initial <i>Markman</i> Brief
RMRB	Vizio's Reply <i>Markman</i> Brief
JC	Joint Claim Construction Chart, dated April 2, 2012
RJC	Rovi's Updated Joint Proposed Claim Construction Chart
VJC	Vizio's Updated Joint Proposed Claim Construction Chart

517 U.S. 370 (1996). Claim construction is a “matter of law exclusively for the court.” *Id.* at 970-71. “The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.” *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000).

Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*); *see also Markman*, 52 F.3d at 979. As the Federal Circuit in *Phillips* explained, courts must analyze each of these components to determine the “ordinary and customary meaning of a claim term” as understood by a person of ordinary skill in the art at the time of the invention. 415 F.3d at 1313. “Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001).

“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*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claims terms.” *Id.* at 1314; *see also Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (“In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to ‘particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.’”). The context in which a term is used in an asserted claim can be “highly

instructive.” *Phillips*, 415 F.3d at 1314. Additionally, other claims in the same patent, asserted or unasserted, may also provide guidance as to the meaning of a claim term. *Id.*

The 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.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, 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.” *Id.* at 1316. “In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Id.* As a general rule, however, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Id.* at 1323. In the end, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be . . . the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

In addition to the claims and the specification, the prosecution history should be examined, if in evidence. *Id.* at 1317; *see also Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). The 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.” *Phillips*, 415 F.3d at 1317; *see also Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to ‘exclude any interpretation that was disclaimed during prosecution.’”).

When the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence (*i.e.*, all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony, and learned treatises) may be considered. *Phillips*, 415 F.3d at 1317. Extrinsic evidence is generally viewed as less reliable than the patent itself and its prosecution history in determining how to define claim terms. *Id.* at 1317. “The court may receive extrinsic evidence to educate itself about the invention and the relevant technology, but the court may not use extrinsic evidence to arrive at a claim construction that is clearly at odds with the construction mandated by the intrinsic evidence.” *Elkay Mfg. Co. v. EbcO Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999).

If, after a review of the intrinsic and extrinsic evidence, a claim term remains ambiguous, the claim should be construed so as to maintain its validity. *Phillips*, 415 F.3d at 1327. Claims, however, cannot be judicially rewritten in order to fulfill the axiom of preserving their validity. *See Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999). Thus, “if the only claim construction that is consistent with the claim’s language and the written description renders the claim invalid, then the axiom does not apply and the claim is simply invalid.” *Id.*

IV. LEVEL OF ORDINARY SKILL IN THE ART

Rovi submits that one of ordinary skill in the art at the time of the respective inventions “would have a Bachelor’s degree in Electrical Engineering or Computer Science and several years of relevant experience, such as the design or research of computer display systems, video recorders, Teletext decoders, or cable or satellite TV set-top boxes, or any equivalent knowledge, training and/or experience.” (CMIB at 5 (citing Bristow Opening Rpt. at ¶¶ 17, 18, 37, 78, 100).)

While Vizio did not set forth a position as to the level of ordinary skill in the art in its briefs, Vizio's expert did opine on this issue in his initial expert report on claim construction.

(Vizio Ex. 4, Roop Opening Rpt., at ¶ 16.) Mr. Roop stated:

I believe that, for the '523 patent, the '993 patent and the '643 patent, a person of ordinary skill would be an electrical engineer with at least a Bachelor's degree, with 1-2 years of experience in the field of visual display device design, programming and implementation. Such a person would necessarily be knowledgeable regarding the pertinent standards and recommendations promulgated by trade organizations and government regulations, particularly those of the Electronic Industries Association ("EIA") and Federal Communications Commission ("FCC").

(*Id.*)

Accordingly, as to "one of ordinary skill in the art," the undersigned finds that, with respect to the asserted patents, one of ordinary skill in the art would have a bachelor's degree in electrical engineering or an equivalent field, with two to four years of industry experience. The undersigned agrees with Vizio that "one of ordinary skill in the art" would also be knowledgeable regarding the pertinent standards and recommendations promulgated by trade organizations and government regulations. One of ordinary skill in the art shall be commensurate with the time of the respective inventions, *i.e.*, the effective filing date for each of the patents-in-suit.

V. THE '993 PATENT

A. Overview

The '993 patent is entitled "Apparatus And Method For Improved Parental Control Of Television Use." The '993 patent issued on December 7, 2010 as a reissue of U.S. Patent No. 6,321,381. The named inventors on the '993 patent are Henry C. Yuen, Roy J. Mankovitz, and Daniel S. Kwoh. The patent is assigned on its face to Gemstar Development Corporation. The '993 patent relates to parental control of television viewing through the blocking of signals of unauthorized television programs. (*See* '993 patent at 2:22-31.) The '993 patent has 73 claims, of which claims 18–21, 23–25, 30, 31, 38, 39, 41, 43, 44, 49, 56, 57, 59, 61, 62 and 67 are asserted against Vizio. Claims 18, 24, 38, 43, 56, and 61 are independent claims. Claims 19-21 and 23 depend from claim 18. Claims 25, 30, and 31 depend from claim 24. Claims 39 and 41 depend from claim 38. Claims 44 and 49 depend from claim 43. Claims 57 and 59 depend from claim 56. Claims 62 and 67 depend from claim 61. The asserted claims read as follows (with the first instance of the agreed-upon terms highlighted in *italics* and the first instance of the disputed terms highlighted in **bold**):

18. A system comprising: a television tuner that supplies video signals to a video display; and a processor configured to block the television tuner from supplying video signals of television programs that meet one or more *user selected program content rating criteria* to the video display; said processor being further configured to allow a user to **override the blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off.**
19. The system of claim 18 wherein the one or more user selected program content rating criteria comprise a plurality of program content rating criteria.
20. The system of claim 19 wherein the processor is configured to override the blocking of one or more of the plurality of program content rating criteria.
21. The system of claim 18 wherein the processor is configured to override the blocking of the display of television programs that meet the user selected program content rating criteria if the user enters a predetermined code.

23. The system of claim 18 further comprises a **filter** wherein the processor is configured to block the television tuner by controlling the operation of the filter.
24. A system comprising: a television tuner that supplies video signals to a video display; and a processor configured to block the television tuner from supplying video signals of television programs that meet one or more of a *plurality of user selected program blocking criteria* to the video display; said processor being further configured to allow a user to override the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off.
25. The system of claim 24 wherein the program blocking criteria comprises ratings criteria.
30. The system of claim 24 wherein the processor is configured to override the blocking of the display of television programs that meet the plurality of user selected blocking criteria if the user enters a predetermined code.
31. The system of claim 24 further comprises a filter wherein the processor is configured to block the television tuner by controlling the operation of the filter.
38. A system comprising: **means for supplying selective video signals to a video display;** and means for blocking the means for supplying from supplying video signals of television programs that meet one or more user selected program content rating criteria to the video display; and **means for overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off.**
39. The system of claim 38 wherein the one or more user selected program content rating criteria comprise a plurality of program content rating criteria.
41. The system of claim 38 wherein the **means for overriding further comprises means for overriding the blocking of the display of television programs that meet the user selected program content rating criteria if a user enters a predetermined code.**
43. A system comprising: means for supplying selective video signals to a video display; **means for blocking the means for supplying from supplying video signals to the video display of television programs that meet one or more of a plurality of user selected program blocking criteria;** and **means for overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off.**
44. The system of claim 43 wherein the program blocking criteria comprises ratings criteria.

49. The system of claim 43 wherein the means for overriding the display of television programs that meet the plurality of user selected program content rating criteria overrides if a user enters a predetermined code.
56. A method comprising: supplying selective video signals to a video displays; blocking the supplying of video signals to the video display of television programs that meet one or more user selected program content rating criteria; overriding the blocking of television programs that meet the user selected program content rating criteria until the shutting off of a system that displays the television programs.
57. The method of claim 56 wherein the one or more user selected program content rating criteria comprise a plurality of program content rating criteria.
59. The method of claim 56 wherein the overriding is performed after a user enters a predetermined code.
61. A method comprising: supplying selective video signals to a video displays; blocking the supplying video signals to the video display of television programs that meet one or more of a plurality of user selected program blocking criteria to the video display; and overriding the blocking of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the shutting off of a system that displays the television programs.
62. The method of claim 61 wherein the program blocking criteria comprises ratings criteria.
67. The method of claim 61 wherein the overriding is performed after a user enters a predetermined code.

('993 patent at 20:47-24:30.)

B. Agreed-Upon and Disputed Claim Terms

1. Construction of Agreed-Upon Claim Terms

a) “user selected program content rating criteria”

Rovi and Vizio agree that the term “user selected program content rating criteria,” which appears in claims 18, 19, 21, 38, 39, 41, 49, 56, and 57 of the '993 patent, should be construed as “choices that allow user selected blocking based on content.” (JC at 12.)

Accordingly, the undersigned hereby adopts the parties' proposed construction and shall construe "user selected program content rating criteria" as "*choices that allow user selected blocking based on content.*"

b) "plurality of user selected program blocking criteria"

The parties agree that "plurality of user selected program blocking criteria," which appears in claims 24, 30, 43, and 61 of the '993 patent, should be construed as "two or more blocking choices." (JC at 12.)

The undersigned hereby adopts the parties' proposed construction and shall construe "plurality of user selected program blocking criteria" as "*two or more blocking choices.*"

2. Construction of Disputed Claim Terms

a) "override/overriding . . . until the system is shut off/until the shutting off of a system"

The phrase "override/overriding . . . until the system is shut off/until the shutting off of a system" appears in claims 18, 24, 38, 43, 56, and 61 of the '993 patent. The parties disagree on the proper claim construction and have proposed the following constructions:

ROVI	VIZIO
Temporary disablement of blocking until the system is turned off	Temporary disablement of blocking up to the time a user turns the system off

Rovi contends that its proposed construction reflects the plain and ordinary meaning of the disputed phrase and is supported by the intrinsic evidence. (CMIB at 43 (citing '993 patent at 13:57-64 ("The user may also select entry 6 on the menu to override the parental control operation by pushing number 6 on, for example, the remote controller 12 of Fig. 1, for normal TV viewing. This will cause the override of step 317 to permit normal TV viewing (step 318) after which the TV will be shut off in step 319 or the menu of Fig. 12 may again be displayed in step 320 by pushing the MENU key 37 shown in Fig. 1."), Figs. 7, 12); CMRB at 24.)

Rovi objects to Vizio's proposed construction on the grounds that it improperly imports the requirement of user action. (CMIB at 43 ("While the specification clearly delineates certain user actions related to override (e.g., '[t]he user may also select entry 6' and 'the menu of Fig. 12 may again be displayed in step 320 by pushing menu key 37') . . . [i]t is the event of the television shutting off that is called for in the claim. The particular entity that causes that event is irrelevant.")) Rovi contends that Vizio is improperly asserting an invalidity attack during the *Markman* proceedings based on a purported failure to satisfy the written description requirement. (*Id.*) Even if Vizio's written description challenge is proper, Rovi argues that it is unfounded. According to Rovi, because Figure 7 of the '993 patent shows a "STORE" step immediately before the "TV OFF" step in the path setting parental controls, the absence of a "STORE" before "TV OFF" in the override path indicates that the override ends after the system is shut off. (*Id.* at 44.)

Vizio contends that based on the plain language of the claim, "override/overriding . . . until the system is shut off/until the shutting off of a system" means "temporary disablement of blocking up to the time a user turns the system off." (RMIB at 91; RMRB at 66 ("The word 'until' has a well-defined meaning, which is 'up to the time,' meaning 'not after.'")) Vizio, however, maintains that this limitation is invalid because the specification does not disclose that the override ceases when "the system is shut off." (RMRB at 60-61; RMIB at 93 ("All [the specification] says is that a user can override the parental control operation to achieve normal TV viewing. (Ex. 4, Roop Rpt., at ¶110). Nothing in this paragraph, or anywhere else, identifies a specific time when the override ceases, a step in which the override status is cleared, or a step when original blocking settings are restored."))

Vizio objects to Rovi's proposed construction arguing that it reads "until" out of the claim and replaces it with the term "after." (RMRB at 67.) Vizio notes that Rovi's expert offered a conflicting construction of "until" which encompassed overrides cleared "before" the system was shut off. (*Id.*) According to Vizio, if Rovi's construction is adopted "until the system is shut off" would be rendered indefinite and superfluous because it allows an override to cease both before or after a system is shut off. (*Id.* at 66-67.)

The parties agree that "overriding" consists of the temporary displacement of parental controls (*i.e.*, blocking), but dispute what the limitation "until the system is shut off" requires. The undersigned agrees with Respondents, finding that the ordinary and customary meaning of "until the system is shut off" is "up to the time the system is turned off." (Resp. Exs. 16, 17; *Phillips*, 415 F.3d at 1314.) There is nothing in the intrinsic record which indicates that the patentee surrendered claim scope or otherwise intended to depart from the customary meaning of this term.⁴ *Phillips*, 415 F.3d at 1316. Respondents' construction, however, improperly requires user action. The term refers to an outcome (*i.e.*, the system is shut off) and does not specify who or what causes that outcome. (*See, e.g.*, '993 patent at 20:54-58 (relating the "override" to "user" action but not the system "shut off").)

Accordingly, the undersigned hereby construes "override . . . until the system is shut off" as "***temporary displacement of blocking up to the time the system is turned off.***"

⁴ Vizio challenges the validity of "overriding . . . until the system is shut off" under the written description requirement of 35 U.S.C. §112 ¶ 1. The undersigned will not address the merits of this challenge as it is premature at this stage of the Investigation.

b) “filter”

The term “filter” appears in claims 23 and 31 of the ’933 patent. The parties disagree on the proper claim construction and have proposed the following constructions:

ROVI	VIZIO
Hardware or software that selectively passes certain elements of a signal and eliminates or minimizes others	Circuitry that blocks specified frequencies

Rovi contends that its proposed construction reflects the plain and ordinary meaning of the term “filter.” (CMIB at 46 (citing Microsoft Press Computer Dictionary (1997) (“[I]n communications and electronics, hardware or software that selectively passes certain elements of a signal and eliminates or minimizes others.”); McGraw Hill Dictionary of Scientific and Technical Terms (1989) (“A device or program that separates data or signals in accordance with specified criteria.”)).)

Rovi objects to Vizio’s proposed construction, arguing that “Vizio eschews the key dictionary definition that explains what that meaning is, notwithstanding its expert’s earlier reliance on *that very same dictionary* in his expert report.” (CMRB at 28 (emphasis original).) Rovi further argues that Vizio improperly narrows the meaning of “filter” to filtering based on frequencies. (CMIB at 47.) The ’993 patent, according to Rovi, “discloses various filters, including both a ‘programmable multiple channel filter’ as well as an ‘intermediate frequency filter.’” (*Id.* (citing ’993 patent at 10:54-63 (“FIG. 3 shows a programmable multiple channel filter 60 which can filter multiple channels from the broad band television signal input 39 . . . ”), 16:15-20 (“The output of frequency down-converter 424 is then filtered by intermediate frequency filter 426 to pass only the channel enabled for viewing . . . ”), 17:28-32).) Rovi argues that there is no evidence that the inventors limited “filter” to frequency filtering and that “the blocking covered in the claims is actually directed to particular channels and not certain

frequencies.” (*Id.* at 47-48 (citing ’993 patent at 11:21-23 (“In FIG. 4 channels 3, 6, and 7 have been filtered so that programs in those channels cannot be viewed.”))).)

Vizio contends that construing “filter” as “circuitry that blocks specified frequencies” reflects the plain meaning of the term and the disclosure in the specification. (RMIB at 115.)

Vizio argues that viewed in the overall context of the claim language, the filter recited “is not just a simple ‘filter’—it is ‘a filter wherein the processor is configured to **block the television tuner** by controlling the operation of the filter.” (RMRB at 80 (emphasis in original).)

According to Vizio, the only way to block a tuner is by frequency filtering and all the specification discloses is frequency filtering. (RMRB at 79-81; RMIB at 115 (“The specification illustrates the function of the programmable multichannel filter in Figure 4, which illustrates that channels at specified frequencies along the frequency spectrum (‘54 MHz’ to ‘800 MHz’; ‘FREQUENCY’) are blocked.”).)

Vizio objects to Rovi’s construction, arguing that “both of Rovi’s alleged ‘alternatives’ to frequency filtering are, in fact, actually implemented by frequency filtering.” (RMIB at 116 (“In Figure 4, channel-based blocking is implemented by a filter on a **frequency** basis, consistent with Vizio’s construction. Rovi’s contentions as to program-based blocking . . . fare no better” as “[y]et again, program-based blocking is implemented by a **frequency** filter in circumstances when the incoming video stream matches the program-based blocking parameters.”); RMRB at 79.) Vizio asserts that the definition of “filter” offered by Rovi does not reflect the understanding of one of ordinary skill in the relevant art because it is taken from a computer dictionary. (RMIB at 117.)

The undersigned finds Vizio’s proposed construction to best reflect the plain meaning of “filter” within the context of the claims. Claims 23 and 31 of the ’993 patent recite a filter that

blocks a television tuner. (See '993 patent at 21:8-10 (“The system of claim 18 further comprises a filter wherein the processor is configured to block the television tuner by controlling the operation of the filter.”), 21:42-44 (“The system of claim 24 further comprises a filter wherein the processor is configured to block the television tuner by controlling the operation of the filter.”).) Blocking a television tuner is done by frequency filtering and accordingly, the only filters disclosed in the specification (*i.e.*, “programmable multiple channel filters” and “intermediate frequency filters”) operate based on frequency. (See '993 patent at 11:19-28; Resp. Ex. 8 at 307:20-309:6 (A. “[A] tuner even in our digital age is still an analog device. So if I’m trying to block a tuner with a filter, I expect that to be . . . a frequency filter and not a packet filter.” Q. “Expect it to be, or know it has to be?” A. “I know it has to be.”).)⁵ The undersigned rejects Rovi’s proposed construction because it seeks to broaden the scope of the claim beyond its plain language to include filtering that does not block a television tuner.

Accordingly, the undersigned hereby construes “filter” as “*circuitry that blocks specified frequencies.*”

- c) **“means for overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off”**

The phrase “means for overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off” appears in claim 38 of the '993 patent. The parties agree that this phrase is

⁵ Rovi implies that Vizio’s expert, Mr. Roop, conceded that the term “filter” is not limited to frequency filtering in his discussion of packet filters. Rovi is incorrect. Mr. Roop merely stated that a packet filter does not block a television tuner, as required by claims 23 and 31. (See Resp. Ex. 8 at 311:25-312:7 (“[A packet filter is] literally half a dozen stages on the other side of the TV circuit, many things are going on before you get there . . . [w]hat’s coming out of the tuner would not change at all.”).

subject to 35 U.S.C. §112 ¶ 6 and also agree on the claimed function. The parties, however, disagree on the corresponding structure and have proposed the following constructions:

ROVI	VIZIO
<p><u>Function:</u> Overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off</p> <p><u>Structure:</u> A microprocessor for implementing the operations described in col. 13, lines 18-64 and illustrated in Fig. 7 and its related discussion, or any equivalents thereof</p>	<p><u>Function:</u> Overriding the blocking by the means for blocking of the video signals of television programs that meet the user selected program content rating criteria until the system is shut off</p> <p><u>Structure:</u> None; this term is indefinite and lacks written description</p>

Rovi contends that the specification discloses sufficient structure for implementing the claimed function – *i.e.*, “a microprocessor for implementing the operations described in column 13, lines 18-64 and illustrated in Fig. 7 and its related discussion, or any equivalents thereof.” (CMIB at 54.) Rovi argues that the specification references that “the operation of the parental control device of FIG. 1 may be better understood by reference to the flow chart in FIG. 7” and discloses that the command controller includes “a microprocessor 80 for . . . performing the parental control functions.” (*Id.* at 56 (citing ’993 patent at 12:66-13:1; 12:9-12).) Because the microprocessor performs the parental control functions, Rovi asserts that it also alters the way the parental control functions are carried out when an override is received. (*Id.* (citing ’993 patent at 13:18-64, Fig. 7).) Rovi disputes Vizio’s assertion that no structure is disclosed for this function, insisting (1) that the override is clearly illustrated in Figure 7; and (2) that Vizio has conceded that Figure 7 is an “algorithm” in its proposed construction for the “means-for-blocking” limitation. (CMRB at 32.)

Vizio argues that this limitation is “indefinite and lack[s] written description for three reasons. First, Vizio asserts that “no ‘specific algorithm’ for performing the claimed ‘overriding

. . . until the system is shut off' function is disclosed in the specification.” (RMIB at 112.)

Second, Vizio contends that there is no link between Rovi's proposed corresponding structure and the claimed function. (*Id.*) Finally, Vizio argues that “the inventors did not actually invent the claimed subject matter because there is no disclosure of ‘overriding . . . until the system is shut off’ in the specification.” (*Id.*) Vizio maintains that Rovi's proposed construction must be rejected because “a microprocessor, by itself, cannot perform any function, much less the claimed function.” (RMIB at 114-15; Vizio Ex. 5, at ¶ 50.)

Because “means for overriding the blocking . . . of the video signals . . . until the system is shut off’ invokes 35 U.S.C. § 112 ¶ 6, the scope of this limitation must be defined by the structure disclosed in the specification plus any equivalents of that structure. *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1331 (Fed. Cir. 2008). In computer-implemented function cases, the corresponding structure in a means-plus-function claim is “the algorithm disclosed in the specification.” *Id.* at 1337. If the specification fails to disclose an algorithm, the applicant has in effect failed to particularly point out and distinctly claim the invention and the entire claim is invalid for indefiniteness under 35 U.S.C §112 ¶ 2. *In re Donaldson*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc).

The undersigned finds that the '993 patent does not disclose the structure that performs the override. The specification devotes a mere two sentences to the override function:

The user may also select entry 6 on the menu to override the parental control operation by pushing number 6 on, for example, the remote controller 12 of FIG. 1 for normal TV viewing. This will cause the override of step 317 to permit normal TV viewing (step 318) after which the TV will be shut off in step 319 or the menu of FIG. 12 may again be displayed in step 320 by pushing the MENU key 37 shown in FIG. 1.

('993 patent at 13:57-64.) The first sentence describes how the user interacts with the menu to engage the override of the parental control operation. (*Id.* at 13:57-59.) The second sentence

describes the outcome of the override, *i.e.*, normal TV viewing. (*Id.* at 13:59-64.) Neither sentence discloses a specific algorithm, or step-by step procedure, that demonstrates how the general purpose microprocessor actually performs the claimed function of “overriding . . . until the system is shut off,” as required by § 112(6). *See Aristocrat*, 521 F.3d at 1337.

Likewise, the undersigned finds that Figure 7 fails to disclose the structure that corresponds to the override function.⁶ Rather than explaining the steps needed to perform the override, Figure 7 depicts the override in the context of the *outcome* of the function (*i.e.*, that step 317, override, leads to step 318, normal TV viewing). Because Figure 7 simply parrots the recited function the undersigned finds that it does not sufficiently define the structure under §112(6). (*See* ’993 patent at Fig. 7; *see also HTC Corp v. IPCom GmbH & Co., KG*, 667 F.3d 1270, 1280 (Fed. Cir. 2012) (the specification has to identify an algorithm that the processor executes and “it ha[s] to do more than parrot the recited function; it ha[s] to describe a means for achieving a particular outcome, not merely the outcome itself”); *Aristocrat*, 521 F.3d at 1334-35 (finding a means-plus-function limitation indefinite because the disclosure identified as providing structure simply offered additional ways of describing the claimed function).)

Accordingly, because the ’993 patent fails to disclose a specific algorithm that performs the function of “overriding the blocking . . . of the video signals,” the undersigned hereby finds that claim 38 is indefinite, and thus, invalid.

⁶ In support of Vizio’s proposed constructions of the “means-for-blocking” terms Vizio relies on Figure 7 as a specific algorithm that describe how blocking is achieved. (RMIB at 107.) Rovi argues that, in doing so, Vizio effectively conceded that Figure 7 provides a specific algorithm for the “means-for-overriding” terms. (CMRB at 32.) That is not the case. Logically, a “specific algorithm” can allow a processor to perform a specific function (here, “blocking”), while not also performing all possible functions (such as “overriding”). Figure 7 shows numerous steps within the flowchart that accomplish the “blocking” task, as opposed to a single step that simply describes the outcome of the override. (*See* ’993 patent at Fig. 7.)

- d) **“means for blocking the means for supplying from supplying video signals of television programs that meet one or more user selected program content rating criteria to the video display”**

The term “means for blocking the means for supplying from supplying video signals of television programs that meet one or more user selected program content rating criteria to the video display” appears in claim 38 of the '993 patent. The undersigned has found hereinabove claim 38 invalid for indefiniteness. (*See* Section V.B.2.c., *supra.*) Therefore, the undersigned need not construe this term.

- e) **“means for overriding further comprises means for overriding the blocking of the display of television programs that meet the user selected program content rating criteria if a user enters a predetermined code”**

The phrase “means for overriding further comprises means for overriding the blocking of the display of television programs that meet the user selected program content rating criteria if a user enters a predetermined code” appears in claim 41 of the '993 patent. Claim 41 depends from claim 38. The undersigned has found hereinabove claim 38 invalid for indefiniteness. (*See* Section V.B.2.c., *supra.*) Therefore, the undersigned need not construe this term.

- f) **“means for overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off”**

The term “means for overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off” appears in claim 43 of the '993 patent. The parties agree that this term is subject to 35 U.S.C. § 112, ¶ 6 and also agree on the claimed function. The parties, however, disagree on the structure, and have proposed the following constructions:

ROVI	RESPONDENTS
<p><u>Function</u>: overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off</p>	<p><u>Function</u>: overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off</p>
<p><u>Structure</u>: a microprocessor for implementing the operations described in column 13, lines 18-64 and illustrated in Fig. 7 and its related discussion, or any equivalents thereof</p>	<p><u>Structure</u>: none; this term is indefinite and lacks written description</p>

The parties offer arguments identical to those set forth in regard to the term “means for overriding the blocking . . . of the video signals of television programs that meet user selected program content rating criteria until the system is shut off.” (*See* Section V.B.2.c., *supra*.) Rovi insists that the structure that corresponds to the function of “overriding the blocking . . . of the video signal of television programs that meet a plurality of user selected blocking criteria . . . until the system is shut off,” is a microprocessor that implements “the operations described in column 13, lines 18-64 and illustrated in Fig. 7 and its related discussion, or any equivalents thereof.” (CMIB at 54-55.) Vizio maintains that this term is indefinite because the specification of the ’993 patent does not disclose a specific algorithm that implements “overriding.” (RMIB 91-100.)

The undersigned finds that the ’993 patent does not disclose the structure that overrides the blocking of the video signal of television programs that meet a plurality of user selected blocking criteria until the system is shut off. As discussed above, when a mean-plus-function limitation attempts to claim a computer implemented function, the specification must recite the algorithm that performs the claimed function. *See HTC*, 667 F.3d at 1280 (a general purpose processor can only overcome an indefiniteness challenge if an algorithm that sufficiently

describes how a general purpose computer will perform the function is disclosed); *Aristocrat*, 521 F.3d at 1337. Here, Rovi points to the same portion of the specification that the undersigned previously found simply parroted the function of the override and did not disclose the relevant structure. (See Section V.B.2.c., *supra*; see also *HTC*, 667 F.3d at 1280; *Aristocrat*, 521 F.3d at 1334-35.) Because all the specification discloses related to “overriding” is its outcome, the undersigned finds that there is not sufficient structure to particularly point out and distinctly claim the invention. *Aristocrat*, 521 F.3d at 1334-35.

Accordingly, because the specification fails to disclose the specific algorithm that corresponds to the function of “overriding the blocking by the means for blocking of the video signal of television programs that meet the plurality of user selected blocking criteria from being used to block the display of television programs until the system is shut off,” claim 43 is indefinite, and thus invalid.

g) “means for supplying selective video signals to a video display”

The term “means for supplying selective video signals to a video display” appears in claims 38 and 43 of the ’993 patent. The undersigned has found hereinabove claims 38 and 43 invalid for indefiniteness. (See Sections V.B.2.c. and f., *supra*.) Therefore, the undersigned need not construe this term.

h) “means for blocking the means for supplying from supplying video signals to the video display of television programs that meet one or more of a plurality of user selected program blocking criteria”

The term “means for blocking the means for supplying from supplying video signals to the video display of television programs that meet one or more of a plurality of user selected program blocking criteria” appears in claim 43 of the ’993 patent. The undersigned has found

hereinabove claim 43 invalid for indefiniteness. (*See* Section V.B.2.f., *supra*.) Therefore, the undersigned need not construe this term.

VI. THE '523 PATENT

A. Overview

The '523 patent is entitled "V-Chip Plus+In-Guide User Interface Apparatus And Method For Programmable Blocking Of Television And Other Viewable Programming, Such As For Parental Control Of A Television Receiver." The '523 patent is issued on March 2, 2004 to named inventors Kenneth Hancock, Thomas Ward, Douglas Macrae, and Jacques Hugon, and is assigned on its face to Index Systems, Inc. The '523 patent describes a system for restricting access to television programs. ('523 patent at Abstract.) The '523 patent has thirteen claims of which claims 1–5, 7–8, and 10–12 are asserted against Vizio. Claims 1 and 11 are independent claims. Claims 2, 4, 5, 7, and 10 depend from claim 1. Claim 3 depends from claim 2 and claim 8 depends from claim 7. Claim 12 depends from claim 11. The asserted claims read as follows (with the first instance of the disputed terms highlighted in **bold**):

1. A system for restricting access to television programs comprising: an input for accepting cursor movement and selection commands; a display that depicts a two dimensional matrix composed of rows and columns of tiles, wherein **either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications** and depicts highlighting of individual tiles or groups of tiles based on the cursor movement commands; and **means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input.**
2. The system of claim 1 wherein the overall program ratings comprise one or more of group of TV-Y, TV-Y7, TV-G, TV-PG, TV-14, TV-MA, G, PG, PG-13, R, NC-17 and X.
3. The system of claim 2 wherein the specific program content indication comprises one or more of the group of L, language, V, violence, MV, mild violence, FV, fantasy violence,

BN, brief nudity, N, nudity, S, sexual content, AS, adult situations, D, and suggestive dialog.

4. The system of claim 1 wherein the specific program content indication comprises one or more of the group of L, language, V, violence, MV, mild violence, FV, fantasy violence, BN, brief nudity, N, nudity, S, sexual content, AS, adult situations, D, and suggestive dialog.
5. The system of claim 1 wherein the display depicts a main blocking menu which allows a user to block or enable viewing of programs globally, or to block or enable viewing of programs by Rating/content codes, Time, Channel, Time Allowance, pay-per-View dollar Allowance and by Grid Selection from an electronic television program schedule grid guide.
7. The system of claim 1 wherein the overall program ratings are listed along a column of the matrix, each program rating having rows corresponding to one or more specific program content indications.
8. The system of claim 7 wherein a title corresponding to one of the overall program ratings is activated or deactivated to block or enable a particular program rating.
10. The system of claim 1 wherein the means for blocking or allowing viewing comprises a circuitry connected between a television signal input and the display.
11. A method of restricting access to television programs comprising: inputting cursor movement and selection commands; displaying a two dimensional matrix composed of rows and columns of tiles, wherein either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications and depicts highlighting of individual tiles or groups of tiles based on the cursor movement commands; and blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding the highlighted tiles when a selection command is entered into the input.
12. The method of claim 11 further comprising activating or deactivating a title corresponding to one of the overall program ratings to block or enable a particular program rating.

('523 patent at 17:16-18:5, 18:10-16, 18:24-43.)

B. Construction of Disputed Claim Terms

1. “specific content ratings”

The term “specific content ratings” appears in claims 1 and 11 of the ’523 patent, and the parties agree that the phrases should be construed in the same way in each of the claims. The parties disagree on the proper claim construction and have proposed the following constructions:

ROVI	VIZIO
Specific program content indications	Indefinite and lacks written description based on the ’523 patent.

Rovi argues that “specific content ratings” should be construed as “specific program content indications” because “specific content ratings” and “specific program content indications” are used interchangeably throughout the claims. (CMIB at 10.) Rovi states that the two terms must have been used interchangeably in claim 1 because, earlier in the claim, a two dimensional matrix was introduced consisting of rows and columns corresponding to “overall program ratings” and “specific program content indications.” (*Id.* (citing ’523 patent at 17:21-33).) Thus, when the claim later refers to columns and rows of the “overall program ratings” and “specific content ratings,” Rovi argues that the original matrix must be at issue because “overall program ratings” is one of the dimensions. (*Id.*) As further evidence of this contention, Rovi argues that the term “specific content ratings” is used with the antecedent “the,” which must refer back to the term “specific program content indications.” (*Id.* at 11.) In response to Vizio’s indefiniteness arguments, Rovi contends that the term is not indefinite because there is no absolute rule that different claim terms have different meanings. (CMRB at 10-11.) Furthermore, Rovi claims that Vizio ignores the Federal Circuit’s ruling that a term is not indefinite if “there is an obvious and correctable error in the claim.” (*Id.* at 11 (citing *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011).)

Vizio argues that the term “specific content ratings” is indefinite because different terms in a claim have different meanings. (RMIB at 84, 86-87.) Vizio contends that the issue is further clouded because “ratings” and “content” are different classes of information that have different characteristics. (*Id.*)

When construing claims, “the general assumption is that different terms have different meanings.” *Symantec Corp. v. Computer Assocs. Int’l, Inc.*, 522 F.3d 1279, 1289 (Fed. Cir. 2008); *Innova/Pure Water*, 381 F.3d at 1119. Additionally, while not an absolute rule, the Federal Circuit presumes that all terms in a claim have meaning. *Innova/Pure Water*, 381 F.3d at 1119. A court can only correct a patent if “(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification, and (2) the prosecution history does not suggest a different interpretation of the claims.” *Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331, 1339 (Fed. Cir. 2011).

Here, there is no intrinsic or extrinsic evidence that demonstrates that “specific content ratings” should be construed as “specific program content indications.” (*See generally* ’523 patent.) Conceptually, the terms “ratings” and “indications” are discernible as different concepts: levels of adult content and presence of a type of content, respectively. (Vizio Ex. 4, Roop Opening Rpt. at ¶ 75.) Additionally, the specification does not define “specific content ratings” or state that “specific content ratings” should be construed as “specific program content indications.” (*See generally* ’523 patent.) Moreover, despite Rovi’s assertions, “specific content ratings” can have more than one reasonable interpretation because “specific content ratings” has no antecedent basis. (*See* Vizio Ex. 5, Roop Rebuttal Rpt., at ¶ 74-76.) The undersigned therefore finds Rovi’s proposed construction unreasonable, as it conflicts with the strong

presumption that different terms in a claim have different meanings. *See Symantec*, 522 F.3d at 1289.

The undersigned further finds that there is not an “obvious and correctable” error in the claim language. The present case is distinguishable from the cases Rovi cites in its briefs. (*See* CMRB at 10-11 (citing *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353 (Fed. Cir. 2011); *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355 (Fed. Cir. 2011)).) In *CBT Flint Partners*, the court held that an obvious error in the phrase, “detect analyze,” could be amended by adding the word “and” between the words “detect” and “analyze.” *CBT Flint Partners*, 654 F.3d at 1358-59 (Fed. Cir. 2011). In *Wellman*, the court chose to interpret a claim based on the specification and did not replace one claim term for another. *Wellman*, 642 F.3d at 1366. In another case, the Federal Circuit refused to replace the term “to” with “at” even though this refusal led to a nonsensical result. *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (“This court, however, repeatedly and consistently has recognized that courts may not redraft claims, whether to make them operable or to sustain their validity.”). Here, Rovi’s construction replaces the term “ratings” with “content indications.” This proposed construction requires an even more drastic change than the cases cited. *See CBT Flint Partners*, 654 F.3d at 1358-59; *Chef Am.*, 358 F.3d at 1374. Thus, the undersigned finds that Rovi’s proposed construction would require the undersigned to impermissibly redraft the claim.

Accordingly, the undersigned hereby determines the term “specific content ratings” to be indefinite, rendering claims 1 and 11 indefinite in their entirety and thus, invalid.

2. “overall program ratings”

The term “overall program ratings” appears in claims 1, 2, 7, 8, 11, and 12 of the ’523 patent. Claims 2 and 7 depend from claim 1. Claim 8 depends from claim 7. Claim 12 depends

from claim 11. The undersigned has found hereinabove claims 1 and 11 invalid for indefiniteness. (*See* Section VI.B.1., *supra.*) Therefore, the undersigned need not construe this term.

3. “specific program content indications”

The term “specific program content indications” appears in claims 1, 3, 4, and 11 of the ’523 patent. Claim 4 depends from claim 1. Claim 3 depends from claim 2, which depends from claim 1. The undersigned has found hereinabove claims 1 and 11 invalid for indefiniteness. (*See* Section VI.B.1., *supra.*) Therefore, the undersigned need not construe this term.

4. “means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input”

The term “means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input” appears in claim 1 of the ’523 patent. The undersigned has found hereinabove claim 1 invalid for indefiniteness. (*See* Section VI.B.1., *supra.*) Therefore, the undersigned need not construe this term.

5. “tiles”

The term “tiles” appears in claims 1 and 11 of the ’523 patent. The undersigned has found hereinabove claims 1 and 11 invalid for indefiniteness. (*See* Section VI.B.1., *supra.*) Therefore, the undersigned need not construe this term.

6. “either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or columns of tiles correspond to specific program content indications”

The phrase “either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or columns of tiles correspond to specific program content

indications” appears in claims 1 and 11 of the ’523 patent. The undersigned has found hereinabove claims 1 and 11 invalid for indefiniteness. (*See* Section VI.B.1., *supra.*) Therefore, the undersigned need not construe this term.

VII. THE ’643 PATENT

A. Overview

The ’643 patent is entitled “Program Guide System With Video-On-Demand Browsing.” The ’643 patent issued on February 17, 2009 to named inventor Michael Ellis. The patent is assigned on its face to United Video Properties, Inc. The ’643 patent relates to television program guides that allow viewers to browse video-on-demand programs. (*See* ’643 patent at 1:12-14.) The ’643 patent has 18 claims, of which claims 1, 3, 4, 7–10, and 13–16 are asserted against Vizio. Claims 1, 7, and 13 are independent claims. Claims 3 and 4 depend from claim 1. Claims 8–10 depend from claim 7. Claims 14–16 depend from claim 13. The asserted claims read as follows (with the first instance of the agreed-upon terms highlighted in *italics* and the first instance of the disputed terms highlighted in **bold**):

1. An **interactive television *video-on-demand program guide system*** implemented on viewer television equipment having a **main display screen** comprising: **means for displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing; means for indicating that a video clip preview is available for a video-on-demand program that is associated with a video-on-demand program listing wherein the indication is provided with the video-on-demand program listing; means for allowing a viewer to select to view the video clip preview from the program guide display; means for displaying the video clip preview on the viewer television equipment; and means for displaying an ordering display screen after the video clip preview of the video-on-demand program is displayed, wherein the ordering display screen provides the viewer with the opportunity to select an ordering option to order the video-on-demand program.**
3. The interactive television program guide system defined in claim 1 **further comprising means for displaying a requested video clip preview in a video window.**

4. The interactive television program guide system defined in claim 1 **further comprising means for displaying a requested video clip preview in a full screen video window.**
7. A method for providing an interactive television video-on-demand program guide system implemented on viewer television equipment having a main display screen comprising: displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing; indicating that a video clip preview is available for a video-on-demand program that is associated with a video-on-demand program listing wherein the indication is provided with the video-on-demand program listing; allowing a viewer to select to view the video clip preview from the program guide display; displaying the video clip preview on the viewer television equipment; and displaying an ordering display screen after the video clip preview of the video-on-demand program is displayed, wherein the ordering display screen provides the viewer with the opportunity to select an ordering option to order the video-on-demand program.
8. The method defined in claim 7 wherein the indicating further comprises using an **icon**.
9. The method defined in claim 7 wherein the displaying the video clip preview further comprises displaying a requested video clip preview in a video window.
10. The method defined in claim 7 wherein the displaying the video clip preview further comprises displaying a requested video clip preview in a full screen video window.
13. Machine-readable media for use in an interactive television video-on-demand program guide system in which an interactive television program guide is implemented on viewer television equipment of a viewer, the viewer television equipment comprising an audio output and a video output, wherein the media is encoded with machine-readable instructions for performing the method comprising: displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing; indicating that a video clip preview is available for a video-on-demand program that is associated with a video-on-demand program listing wherein the indication is provided with the video-on-demand program listing; allowing a viewer to select to view the video clip preview from the program guide display; displaying the video clip preview on the viewer television equipment; and displaying an ordering display screen after the video clip preview of the video-on-demand program is displayed, wherein the ordering display screen provides the viewer with the opportunity to select an ordering option to order the video-on-demand program.
14. The machine-readable media defined in claim 13 wherein the indicating further comprises using an icon.
15. The machine-readable media defined in claim 13 wherein the displaying the video clip preview further comprises displaying a requested video clip preview in a video window.

16. The machine-readable media defined in claim 13 wherein the displaying the video clip review further comprises displaying a requested video clip preview in a full screen video window.

(’643 patent at 11:60-12:12, 12:15-20, 12:29-56, 12:65-14:10.)

B. Agreed-Upon and Disputed Claim Terms

1. Construction of Agreed-Upon Claim Term

a) “video-on-demand program”

The term “video-on-demand program” appears in claims 1, 7, and 13 of the ’643 patent. The parties agree that this term should be construed as “a program that is available virtually at any time for viewing by a viewer.”

Accordingly, the undersigned hereby adopts the parties’ proposed construction and shall construe “video-on-demand program” as “*a program that is available virtually at any time for viewing by a viewer.*”

2. Construction of Disputed Claim Terms

a) “means for displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing”

The term “means for displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing” appears in claim 1 of the ’643 patent. The parties agree that this term is subject to 35 U.S.C. § 112, ¶ 6 and also agree on the claimed function. The parties, however, disagree on the structure, and have proposed the following constructions:

ROVI	VIZIO
<u>Function:</u> displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing	<u>Function:</u> displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing
<u>Structure:</u> a processor that performs any of the algorithms to display a program guide display on	<u>Structure:</u> Vizio contends that this element lacks sufficient structure and so violates 35 U.S.C. §

ROVI	VIZIO
<p>the viewer television equipment as described in col. 2, lines 25-33, col. 3, lines 24-34, col. 3, lines 42-44, col. 4, lines 37-47, col. 6, lines 37-65, col. 7, lines 6-40, col. 8, lines 5-15, col. 8, lines 46-50, col. 9, lines 32-41, col. 10, lines 8-22, col. 10, line 59 – col. 11, line 52; and/or Figures 6A, 6B, and/or 9 and related text from the specification, or equivalents thereof</p> <p><u>Alternate Structure:</u> The specification states that [1] “[v]iewer television equipment 30 may ... be any suitable equipment into which circuitry similar to set-top box circuitry has been integrated, such as an advanced television receiver (such as HDTV)” (col. 6, lines 37-65); and that [2] “... contains a processor to handle tasks associated with implementing an interactive television program guide on the viewer television equipment 30”; and [3] “... may store certain information such as video-on-demand programs and video-on-demand program data in home storage device 35 ...”; and further [4] “... may be controlled by one or more remote controls 50 or any other suitable viewer input interface ..., etc.” col. 7, lines 6- 40; see also col. 2, lines 25-33. The patent recites that “[s]ome of the steps involved in providing the browsing display features ... are illustrated in the flow chart of FIG. 9. At step 100, the program guide provides the viewer with an option for invoking either the video-on-demand browsing mode or the normal browsing mode. If the viewer chooses to invoke the video-on-demand browsing mode, program guide display 70 is displayed on viewer television equipment 30 at step 101. If the viewer chooses to invoke the normal browsing mode, the program guide displays a program guide display (not shown) on viewer television equipment 30, possibly displaying a program listing reflecting the current channel. Assuming video-on-demand browsing mode is chosen at step 100, program guide display 70 is displayed on viewer television equipment 30 at step 101. ...” col. 10:59-11:52. see col. 3, lines 42-44; Fig. 9. “... each time a viewer scrolls program guide display 70 to a new video-on-demand program listing, program description box 73 is updated to display information for the currently shown program.” col. 9:32-41. “Although program guide display 70 is shown in FIG. 6 is only a single cell or element in width (i.e., in the vertical dimension), and a single cell or</p>	<p>112.</p>

ROVI	VIZIO
<p>element in length (i.e., in the horizontal dimension), it may also be displayed as multiple cells in either or both dimensions (not shown).” col. 8, lines 46-50; see also col. 4, lines 37-47; col. 8, lines 5-15; col. 10, lines 8-22; col. 3, lines 24-34; Figs. 6A, 6B “When program guide display 70 is initially displayed, it may be set to a ‘default’ category and program listing, or it may return to previously selected category and/or program. ...” col. 10, line 59 - col. 11, line 52; see col. 3, lines 42-44; Fig. 9.</p>	

Rovi contends one having skill in the art at the time of the '643 invention would have known that the corresponding structure is a processor that performs algorithms to display a program guide display. (*Id.* at 59.) Rovi asserts that Vizio’s expert witness admitted that “a person skilled in the art would understand that a processor is used.” (*Id.* at 59 (citing Rovi Ex. 11, Roop Tr. at 219:13-220:11).) Additionally, Rovi argues that large portions of the specification teach several means to achieve this particular outcome. (*Id.* at 59-64.) Furthermore, Rovi argues that Figures 6A and 6B depict embodiments of particular outcomes that a person of ordinary skill in the art would be able to implement the software to duplicate. (*Id.* at 61 (citing '643 patent at 3:24-28, Fig. 6A).) Lastly, Rovi contends that the flowchart shown in Figure 9 details how a processor may be instructed to implement a program guide display on the viewer television equipment to allow a viewer to interact with the system. (*Id.* at 62-63 (citing '643 patent at 3:42-44, Fig. 9).)

Vizio argues that the term “means for displaying a program guide display on the viewer television equipment that displays at least one video-on-demand program listing” is indefinite because the '643 patent does not (1) disclose a specific structure for performing the claimed function, (2) disclose a “specific algorithm” for performing the claimed function, or (3) specifically link any specific structure or “specific algorithm” to the claimed function. (RMIB at

19.) Vizio contends that Rovi cites to eleven different portions of the patent specification, three figures, and a vague catch-all (“related text from the specification”) in an attempt to define the necessary structure. (*Id.*) Moreover, Vizio argues that Rovi’s expert gave an incomprehensible response when asked to articulate the “specific algorithm” for performing the claimed function. (*Id.* at 22.) Vizio also contends that Rovi’s expert could not even state how many different algorithms Rovi alleges are disclosed by the specification. (*Id.* at 23 (citing Vizio Ex. 9, Bristow Rough Depo. Tr. at 105:5-8).) Vizio’s remaining arguments claim that in each instance Rovi cited the specification as providing a particular structure, Rovi merely provides general display outcomes, as opposed to the means or algorithms necessary for achieving said outcomes. (RMIB at 24-29.) Finally, Vizio claims that Rovi improperly conflates the enablement requirement with the § 112, ¶ 6 disclosure requirement for means-plus-function claims. (RMRB at 6-10.) In conclusion, Vizio argues that this evidence shows that Rovi engaged in purely functional claiming that the Federal Circuit has repeatedly held is improper. (RMIB at 29.)

In computer-implemented function cases, the corresponding structure in a means-plus-function claim is “the algorithm disclosed in the specification.” *Aristocrat Techs.*, 521 F.3d at 1333. The structure must be more than a general purpose processor. *Id.* Without a more specific structure, the public does not know the bounds of the protected invention. *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008). The algorithm does not need to be a listing of source code or even a highly detailed description, but still must define sufficient structure. *Aristocrat*, 521 F.3d at 1337-38. Recently, the Federal Circuit recently provided four examples of what might satisfy disclosure of a “specific algorithm,” including:

- (1) A series of instructions for the computer to follow, whether in mathematical formula or a word description of the procedure to be implemented by a suitably programmed computer;

- (2) A step-by-step procedure for solving a problem or accomplishing some end;
- (3) A full statement of a finite number of steps; and
- (4) A mathematical formula, in prose, or as a flow chart.

Typhoon Touch Techs. v. Dell, Inc., 659 F.3d 1376, 1384-85 (Fed. Cir. 2011). Even an algorithm described in prose must still be a step-by-step procedure. *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012). Furthermore, the patent holder cannot simply “state or later argue that persons of ordinary skill in the art would know what structures to use to accomplish the claimed function.” *Aristocrat*, 521 F.3d at 1337; *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007) (“[T]he testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification.”).

In the present case, the undersigned finds that the '643 patent specification never discloses a specific algorithm to “display a program guide display.” (*See generally* '643 patent.) In an attempt to save the term, Rovi indiscriminately cites to large portions of the specification to create its proposed construction. (*See* JC at 3.) Each disclosure cited by Rovi includes pure function language, an outcome, or structure unrelated to the claimed function. *See HTC Corp. v. IPCom GmbH & Co., KG*, 667 F.3d 1270, 1280 (Fed. Cir. 2012) (“[I]t ha[s] to do more than parrot the recited function; it ha[s] to describe a means for achieving a particular outcome, not merely the outcome itself.”). Additionally, Rovi’s construction includes several “and/or” conjunctions, making it impossible for the undersigned to determine the structures necessary to perform the specified function.⁷ (RJC at 3, 13.) The following chart demonstrates how Rovi’s citations to the specification do not disclose structure, but rather, merely describe embodiments

⁷ Rovi’s own expert, Mr. Bristow, could not even answer how many algorithms he thinks are present in the structure that may perform the specified function. (Vizio Ex. 9, Bristow Rough Depo. Tr. at 105:5-8 (“I believe at some point you asked me, you know, how many algorithms. I said there’s at least – you know, there’s one, there may be more, because there’s different screens, you know, may be produced.”).) Moreover, when asked to identify any algorithm present in the specification, Mr. Bristow was unable to do so. (*Id.* at 97:18-99:5.)

of the program guide, detail the user’s interaction with the program guide, consist of final outcomes instead of “specific algorithms,” or explain general equipment related to viewer televisions.

Proposed Structure	Analysis
<p>Col. 2, lines 25-33; Col. 3, lines 24-34; Col. 4, lines 37-47; Col. 7, lines 6-40; Col. 8, lines 5-15; Col. 8, lines 46-50; Col. 9, lines 32-41; Col. 10, lines 8-22; Col. 10, line 59 – col. 11, line 52; Figures 6A, 6B.</p>	<p><i>These portions of the specification only describe how the program guide appears to the user once it is already displayed.</i> (’643 patent at 9:32-41 (“while program guide display 70 is active”).) These passages disclose specific embodiments of how the program guide display may appear to the user or how the user interacts with the interface. (<i>Id.</i> at 8:5-15 (“However, if desired, program guide display 70 may also be superimposed on top of a portion of current program 77 as shown in FIG. 6.”), 10:8-22 (“If a viewer who is browsing the program listings on program guide display 70 becomes interested in a particular video-on-demand program, he or she may request that program.”).) None of these citations disclose a “specific algorithm” for actually displaying the program display. (<i>Id.</i>; <i>See e.g.</i>, Vizio Ex. 5, Roop Rebuttal Rpt. at ¶ 90-100.)</p>
<p>Col. 3, lines 42-44; Col. 10, line 59 – col. 11, line 52; Figure 9.</p>	<p><i>These citations are final outcomes that parrot the claimed function, not step-by-step procedures as described in Aristocrat or Typhoon Touch.</i> <i>Aristocrat</i>, 521 F.3d at 1337-38; <i>Typhoon</i>, 659 F.3d at 1384-85; Vizio Ex. 5, Roop Rebuttal Rpt. at ¶ 92-93.) These citations claim that Figure 9 provides steps for displaying a browsing display screen; however, the flow chart (<i>i.e.</i>, Fig. 9) only states the final outcome in a single step. (’643 patent at Fig. 9; Vizio Ex. 5, Roop Rebuttal Rpt. at ¶ 90.) As Figure 9 shows, step 101 is “display video-on-demand program guide.” (’643 patent at Fig. 9.)</p>

Proposed Structure	Analysis
Col. 6, lines 37-65.	<i>This passage discloses basic equipment and structures of general television equipment and facilities that may be necessary at a consumer's location or regional distribution facilities.</i> ('643 patent at 6:37-58.) This passage does not disclose a "specific algorithm" and does not relate to the program guide display. (<i>Id.</i> ; Vizio Ex. 5, Roop Rebuttal Rpt. at ¶ 95.)
Col. 7, lines 6-40.	<i>This portion of the specification discloses that a general purpose processor will handle tasks associated with implementing an interactive television program guide.</i> ('643 patent at 7:6-11.) A general purpose processor is not a sufficient structure to support a computer-implemented means-plus-function claim. <i>Aristocrat</i> , 521 F.3d at 1333.

Rovi improperly contends that *Typhoon Touch* supports its prose construction. In *Typhoon Touch*, the Federal Circuit found a finite step-by-step procedure for cross-referencing data. *Typhoon*, 659 F.3d at 1386. The specification in that case explained that the CPU followed a series of steps that included storing data, searching a library of responses, and displaying a match if found. (*Id.*) In contrast, neither Rovi's construction nor Mr. Bristow's confusing and convoluted response can be formatted into a step-by-step procedure or algorithm as the method in *Typhoon Touch*. (See Vizio Ex. 9, Bristow Rough Depo. Tr., at 97:18-99:5; see also *Typhoon*, 659 F.3d at 1386.)

Rovi attempts to overcome its shortcomings by claiming that a person skilled in the art would be able to implement software or write respective computer programs to carry out each citation's particular outcome. (CMIB at 59-68.) However, this conflates the enablement requirement with the § 112, ¶ 6 requirement to disclose an appropriate structure that performs the claimed function. *Aristocrat*, 521 F.3d at 1336. For example, Rovi cites the following cross-