

No. 19-__

**In the
Supreme Court of the United States**

COMCAST CORPORATION, ET AL.,

Petitioners,

v.

INTERNATIONAL TRADE COMMISSION, ET AL.,

Respondents.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED
STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

APPENDIX VOLUME III OF III

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because a tuner is “unavailable” does not mean that it has to be “in use”—a tuner could be unavailable, for example, if it is disabled or reserved for a purpose other than “use” to view or record television programming. Nothing in the intrinsic record of the patent restricts or limits the “availability” of a tuner to whether or not that tuner is “in use.”

In the context of the infringement dispute whether or not a tuner is (and whether or not “all tuners” are) “in use” or not is relevant because—and as will be explained in more detail below—the accused products limit the number of simultaneous recordings not based on the number of tuners (and whether they are “all” in use or not) but based on how many streams of data the cable card can decrypt. Thus, and for example, an accused product may have eight tuners, but only five of those tuners are available and capable of presenting television to the user because the cable card limits how many tuners can be utilized simultaneously. Balakrishnan Tr. 360-61; RX-0846C (Garcia RWS) at Q/A 25-26; Garcia Tr. 627.

Rovi Br. at 139-40 (footnote omitted).

Comcast argues:

The entire concept of the ’512 Patent is to detect conflicts when all tuners are occupied in a multi-tuner system. *See e.g.* JX-0006 (’512 Patent) at 1:65-2:13; *see*

also RDX-1218 (JX-0006 at Figs. 4(b) and 4(c) (annotated)) (demonstrating that the '512 Patent clearly discloses that the user has the option to cancel a program when the "second tuner is in use"). A conflict can only arise when it implicates the "nth" (last allocated tuner). *See supra* § IX.C.2.e. In this condition, consistent with Respondents' proposed construction, all the "tuners capable of performing the requested operation are in use."

The '512 Patent clearly discloses a system in which a conflict is determined anytime all of the tuners are occupied - regardless of the manner in which they are occupied. *See* RDX-1240 (JX-0006 at Fig. 3(b) (annotated)). In Fig. 3(b) the tuner is occupied if it is displaying a television program, recording a program, or providing a secondary function (*e.g.*, picture-in-picture or providing program listings data.) RX-0847C (Bederson RWS) at Q/A33; *See also* RX-0053 ('487 Prov. App.) at 1 ("In the case of multiple internal tuners in the settop, . . . If the viewer is currently using both tuners (for example, for picture-in-picture) that activity will need to be interrupted"). In addition, the claims of the '512 Patent themselves indicate that an alert occurs any time the tuners are occupied, regardless of the service being delivered. For example, claims 8 and 9 of the '512 Patent make clear that a conflict is determined, and an alert is provided,

when the user is viewing a program using one tuner and recording a program using the other viewer. JX-0006 at Cls. 8 and 9; RX-0847C at Q/A 36. And claims 4 and 16 clearly state a “tuning operation” include “viewing television programming.” JX-0006 at Cls. 4, 8, 9 and 16.

In contrast to Respondent’s proposal, Rovi’s proposal is inconsistent with the purpose of the patent, and even Dr. Balakrishnan’s own testimony, which agrees that, “determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation” would not be satisfied until the last tuner (the 100th tuner in a 100 tuner) was occupied. Tr. 329:23-330:15 (confirming deposition testimony); RX-0847C at Q/A 37, 26. Rovi’s proposed construction that “the first and second tuners *cannot perform* the requested tuning operation” conflates lack of availability due to use (as the patent describes), with inability. *Id.* This has the effect of sweeping into the claims *any* scenario where the tuner “cannot perform” the requested operation, including cases when the tuner “cannot perform” the operation due to factors wholly unrelated to tuner conflicts; an error in the controller, incoming RF signal to be selected by the tuner, and numerous other hardware failures could leave the tuner so it “cannot perform the operation.” Those scenarios cannot fairly

be swept into the claims. And, of course, Rovi's proposal is redundant of the second half of the limitation requiring "wherein the first tuner and the second tuner are both capable of performing the tuning operation," which already addresses the capability (*i.e.*, whether the tuner can perform the operation). *Id.*

Resps. Br. at 178-79.

Rovi replies:

Respondents proposed construction exceeds the plain meaning of the claim language. Resps. Br. at 178. All that the language requires is what Rovi proposes—"the first and second tuners cannot perform the requested tuning operation." Compls. Br. at 139. Respondents assert the proper construction of this term requires reading-in limitations that equates no first or second tuner being "available" with "all tuners" needing to be "in use" at the same time. Resps. Br. at 178. As Rovi explained, Respondents' incorrectly "equate[] the 'first' and 'second' tuners with 'all tuners'" and further incorrectly "equate[] 'unavailable' with 'in use.'" Compls. Br. at 140 (Rovi explaining further that a tuner can be "unavailable" for reasons other than it being "in use"); *id.* at 161-163 (Rovi explaining how the Accused Products infringe this limitation). No intrinsic source of meaning compels reading-in

Respondents' claim additions, and Rovi's plain meaning construction, which requires that "the first and second tuners cannot perform the requested tuning operation"—*i.e.* that they are "unavailable" to perform the "requested tuning operation"—should be adopted. *See id.*

Rovi Reply at 51-52.

Comcast replies:

Rovi's criticisms of Respondents' constructions are inconsistent with its own statements, and those of its expert. Rovi summarizes the purpose of the '512 Patent as addressing "[a] tuner conflict [that] occurs when ***no tuner is available*** to perform a user's request to perform a tuning operation." Compl. PoHB at 133 (emphasis added). This purpose of the patent described by Rovi—in which "no tuner is available"—is logically coincident with "all tuners" being in use as recited in Respondents' construction.

In contrast, Rovi's proposed construction would lead to the absurd result that in, *e.g.*, a three tuner system, if two tuners are busy, and one tuner is free, this limitation would still be satisfied. *See* Tr. 299:16-301:1 (testifying that limitation would still be met when 3 out of 5 tuners were idle and not in use). If one tuner is free, how can there be "no tuner available," as Rovi contends is the

purpose of the invention? Dr. Balarkishnan's [*sic*] provides similarly inconsistent opinions—on one hand admitting that tuner conflicts occur when no tuner is available, and on the other testifying that this limitation would still be met when there are free/unused tuners. *Compare* Tr. 289:16-290:25 (testifying that purpose of the invention is to provide an alert when both of the tuners in a two tuner system are in use) *with* Tr. 299:16-300:1; *see also* RX-0847C at Q/A 37.

Rovi attempts to rehabilitate its inconsistent positions, as discussed above, by arguing that just because a tuner is “not available” (as recited in the claim) does not require that it be “in use” (as recited in Respondents’ construction). Dr. Balakrishnan states that “a tuner that is ‘in use’ could still be ‘available’ depending on how a system is set up.” Compl. PoHB at 140. But, he provides no evidence in the intrinsic or extrinsic record to support his opinion, and interestingly, provides no description of any system in which a tuner “in use” could be still available. CX-0003C at Q/A 218.

The effect of Rovi’s proposal, and Dr. Balakrishnan’s opinion, is that the claims of the ’512 Patent would read on “rules,” rather than actual tuner conflicts. For example, if there are ten tuners capable of displaying up to ten

programs, and a *rule* is set to allow a viewer to watch only two premium channels (*e.g.*, HBO, Showtime) at one time, this would imply that ten tuners are available when ten non-premium channels are watched, and only two tuners are available when premium channels are watched. But the patent does not teach this. Rather, the patent clearly teaches that a first tuner may be occupied by, *e.g.*, displaying or recording a program (RX-0847C at Q/A 26; RDX-1237 (JX-0006 at Fig. 3(b) (annotated); JX-0006 ('512 Patent) at 8:17-32), subsequently, the “other tuner,” or “second tuner” in a two tuner system, becomes occupied by either displaying or recording a second program, (RX-0847C at Q/A 26; RDX-1238 (JX-0006 at Fig 3(b) (annotated)); JX-0006 at 8:33-65, 9:44-59), and the IPG only issues an alert when a third operation is requested (RX-0847C at Q/A 26; RDX-1239 (JX-0006 at Fig 3(b) (annotated)); JX-0006 at 9:9-36, 9:44-59). The alert cannot be issued until the Nth, or last, tuner is occupied. RX-0847C at Q/A 32-38. Yet, through its construction, Rovi seeks to expand the claims beyond purpose of the invention—“tuner conflicts”—and expand it to any limit imposed on the number of channels that can be watched or recorded.

Resps. Reply at 54-55.

As an initial matter, the administrative law judge has determined that this phrase does not need

construction. The words in the claim are used according to their common, plain meaning.

In the alternative, the administrative law judge construes the phrases “neither a first tuner nor a second tuner are available to perform the requested tuning operation” (claim 1) and “neither the first tuner nor the second tuner are available to perform the requested tuning operation” (claim 13) to mean “the first and second tuners cannot perform the requested tuning operation.” Rovi’s construction comports with the plain and ordinary meaning of the words in the claim.

Comcast’s construction requires that “all tuners capable of performing the requested operation are in use[.]” Comcast’s construction does not have support in the specification. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007) (“a sound claim construction need not always purge every shred of ambiguity”); *PPG Indus. v. Guardian Indus. Corp.*; 156 F.3d 1351, 1355 (Fed. Cir. 1998) (“Claims are often drafted using terminology that is not as precise or specific as it might be. . . . That does not mean, however, that a court, under the rubric of claim construction, may give a claim whatever additional precision or specificity is necessary to facilitate a comparison between the claim and the accused product. Rather, after the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.”).

(8) Resolving a conflict when multiple operations are performed using multiple tuners

The phrase “resolving a conflict when multiple operations are performed using multiple tuners” only appears in the preambles of claims 1 and 13.¹⁴⁵ The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
Determining how to allocate a tuner to perform a requested operation if no tuner is available to perform the requested tuning operation	Comcast does not clearly present a construction in its post-hearing brief.

See Rovi Br. at 141; Resps. Br. at 184-85.

Rovi’s entire opening argument is:

One of ordinary skill in the art would have understood the phrase “resolving a conflict when multiple operations are performed using multiple tuners” to mean “determining how to allocate a tuner to perform a requested operation if no tuner is available to perform the requested tuning operation.” CX-0003C

¹⁴⁵ The patent uses the word “conflict” four times—twice in the claims, once in describing Figure 4(b), and once in describing Figure 4(c). With regard to Figures 4(b) and 4(c), the patent proposes providing a screen “which acts to alert the viewer to a conflict in tuner allocation and usage.” JX-0006 at 10:27-28; 10:48-49.

(Balakrishnan WS) at Q/A 219. Respondents contend that this phrase means “Determining how to allocate a tuner to perform a requested operation if all tuners are in use.” As with the prior term, and for similar reasons, Respondents’ construction improperly adds the words, “all tuners are in use” with no basis in the intrinsic record. CX-0003C (Balakrishnan WS) at Q/A 220.

Rovi Br. at 141.

Comcast’s argument is:

As discussed above in §§ IX.C.2.a-d, and detailed in Fig. 3(b), the ’512 Patent is directed to the goal of resolving conflicts in a system with multiple tuners (*i.e.*, *n* tuners). Such a conflict arises when all of the tuners, including the last allocated tuner - *i.e.*, the *n*th tuner - are occupied and a new request is received by the IPG. JX-0006 (the ’512 Patent) at 1:65-2:13 (emphasis added); *see also id.* at 9:44-59 (“...Thus following step 308, both tuners are in use. . .”); 8:66-9:8 (“... Thus following step 309, both tuners are in use. . .”). Respondents’ construction, as for the term “neither a/the first tuner nor the second tuner are available to perform the requested tuning operation,” is consistent with the purpose of the invention and the intrinsic record.

Resps. Br. at 184-85.

Rovi replies:

Respondents do not separately address Rovi's construction for the phrase "resolving a conflict when multiple operations are performed using multiple tuners." Instead, Respondents repeat the arguments that they made in support of their construction of the phrase "neither a/the first tuner nor the second tuner are available to perform the requested tuning operation," which, as Rovi discussed *supra* at Section VII(A)(6), is incorrect. For the reasons established in Rovi's Post-Hearing Brief (Compls. Br. at 141), the ALJ should adopt Rovi's proposed construction.

Rovi Reply at 52.

In a footnote directed toward the "neither a/the first tuner nor a/the second tuner are available to perform the requested tuning operation" phrase, Comcast adds:

The parties' dispute over "resolving a conflict when multiple operations are performed using multiple tuners" is fully reflected in this claim term. The central dispute is whether the claim term extends to the scenario when the tuning operation "cannot be performed" as recited in Rovi's construction for "neither a/the first tuner nor a/the second tuner . . ." or Respondents' construction which recites that "all the tuners are in use."

Resps. Reply at 54 n.20.

The parties agree that the construction should begin with “determining how to allocate a tuner to perform a requested operation if. . . [,]” but they differ on whether the subsequent condition should be that “no tuner is available to perform the requested tuning operation” (Rovi) or that “all tuners are in use” (Comcast). There is no substantive difference between Rovi and Comcast’s constructions. *See also* CX-0003C at Q/A 220-22 (conceding similarities and stating opinions do not change under either party’s construction).

Accordingly, the administrative law judge construes the phrase “resolving a conflict when multiple operations are performed using multiple tuners” to mean “determining how to allocate a tuner to perform a requested operation if no tuner is available to perform the requested tuning operation.”

(9) Interactive television program guide

The term “interactive television program guide” appears in claims 1, 10, 13, and 22 and throughout the specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
software that, among other things, allows a user to navigate to and select program listings	Comcast does not clearly present a construction in its post-hearing brief.

See Rovi Br. at 145; Resps. Br. at 181-82.

Rovi’s entire argument for this term follows:

The term “interactive television program guide” means “software that, among other things, allows a user to navigate to and select program listings.” CX-0003C (Balakrishnan WS) at Q/A 236-237.

Rovi Br. at 145.

Comcast’s entire argument for the terms “interactive television program guide,” “interactive television program guide implemented on the system” and “system” follows:

The ’512 Patent is clearly about the use of an IPG resident on “user television equipment” that provides the user the ability to view television programs and set recordings using a VCR. RX-0847C (Bederson RWS) at Q/A 48; JX-0006 (’512 Patent) at 1:55-64, 1:22-34 (“ . . .[w]hen the selected program begins, the program guide tunes the set-top box to the channel showing the program and directs a videocassette recorder (“VCR”) to begin recording. . . .”), 1:48-51 (“It is therefore an object of the present invention to provide an interactive television program guide system which allows a user to record one program while simultaneously watching another program.”). The ’512 Patent also proposes that each user has a user guide equipment that acts as a receiver, such as a STB. JX-0006 at 4:54-5:7 (“Each user has user program guide equipment that acts as a receiver. The user program guide equipment is typically a set-top box such as set-top box

112. . .”). As is shown clearly in Fig 2(a) of the '512 Patent, a POSITA would understand that the STB hosts the program guide and provides “program guide command signals.” RDX-1243 (JX-0006 at Fig 2(b) (annotated)) (highlighting the STB (112) with two tuners); RX-0847C at Q/A 49. In addition, the STB provides further commands, via the infrared transmitter to other equipment (e.g. a video cassette recorder). See JX-0006 at 6:65-7:7 (“The interactive television program guide command signals on line 212 that are provided to IR transmitter 200 allow channel selection requests and VCR start and record commands to be sent from the interactive television program guide in set-top box 112 to VCR 114. . .”) Fig 2(b) (element 200).

Resps. Br. at 181-82.

Rovi replies:

Respondents address this term together with the term “system” and therefore do not separately address either side’s construction for “interactive television program guide.” Resps. Br. at 181-82. For the same reasons set forth in Compls. Br. at 144-45, Rovi’s construction is correct.

Rovi Reply at 54-55.

Comcast, with a focus on claim 13 and its means-plus-function argument directed toward another claim phrase, replies:

Rovi misstates *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). See Compl. PoHB at 182-183. The lack of the term “means” does not create a strong presumption that § 112(6) does not apply, as Rovi contends. *Id.* at 182, n. 24. Rather *Williamson* holds exactly the **opposite** - that the presumption that § 112(6) does not apply to a patent claim that does not use the word “means” **is not strong**. See *Williamson*, 792 F.3d at 1349 (“Our consideration of this case has led us to conclude that such a heightened burden is unjustified and that ***we should abandon characterizing as “strong” the presumption*** that a limitation lacking the word “means” is not subject to § 112, para. 6.”) (emphasis added).

And though claim 13 admittedly lacks the specific term “means,” the entirety of the claim limitation—“an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to”—recites function, without structure, which amounts to impermissible functional claiming. The cure for functional claims is means-plus-function treatment. And the only structure for an “interactive television program guide implemented on the system . . .” referenced in the ’512 is set top box 112 with a processor, or other suitable equipment with similar circuitry, at the user’s premises. RX-0847C at Q/A 46-50.

Resps. Reply at 58-59.

The administrative law judge construes “interactive television program guide” to mean “software that, among other things, allows a user to navigate to and select program listings.”

As an initial matter, there is little substantive difference between the parties’ constructions. *See also* CX-0003C at Q/A 238 (noting similarity between constructions). For example, both parties argue that the interactive television program guide connotes software. Further, Rovi’s construction does not foreclose functionality appearing in the dependent claims, such that functions like cancelling a function, collecting program guide data, browsing the Internet, or playing a music channel would not be excluded under a different construction. *See* JX-0006 at 18:54-59 (claim 3); 18:66-19:3 (claim 5).

(10) Direct the interactive television program guide

The phrase “direct the interactive television program guide” appears in claims 1, 9, 13, and 21 and once in the specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
“direct the interactive television program guide” has its plain and ordinary meaning, where the plain and ordinary meaning is “control the operations of the	“cause the interactive [<i>sic</i>] to command termination of a function that is already being performed.”

interactive television program guide to stop a-function utilizing a signal tuned to by a tuner”	
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See Rovi Br. at 141; Resps. Br. at 183.

Rovi’s entire opening argument for this term is:

One of ordinary skill in the art would have understood the phrase “direct the interactive television program guide” to have its plain and ordinary meaning— “control the operations of the interactive television program guide to stop a function utilizing a signal tuned to by a tuner.” CX-0003C (Balakrishnan WS) at Q/A 225.

Rovi Br. at 141.

Comcast entire argument for this term is:

As discussed above in §§ IX.C.2.e-d, the ’512 Patent details that the program guide controls the operation of the tuners. This basic logic supports Respondents’ construction, that “direct[ing] the interactive television program guide to cancel a function” is to “cause the interactive to command termination of a function *that is already being performed.*” And as shown by the claim language, the program guide is directed to cancel the function after the user makes a selection to resolve the

conflict. JX-0006 ('512 Patent) at claim 1 (“provides a user with an opportunity to ***direct the interactive television program guide to cancel a function of the second tuner*** to permit the second tuner to perform the requested tuning operation”) (emphasis added).

Similarly, as shown in Fig. 3(b), the user can choose to cancel the function of the second tuner. RDX-1239 (JX-0006 at Fig. 3(b) (*e.g.*, element 316)); *see also* RDX-1218 (JX-0006 at Figs. 4(b) and 4(c) (annotated)) (showing conflict alert screens when the second tuner of a two tuner system is in use). If the user chooses to cancel the function, the IPG cancels the function that is currently supported by the tuner. *See id.* at Fig 3(b) (element 320, “program guide sends IR commands to stop recording process”).

Resps. Br. at 183-84.

Rovi replies:

Respondents do not separately address this phrase in their Brief, but instead address its construction as part of the phrase “cancel the function of the second tuner” discussed below. For the reasons established in Rovi’s Post-Hearing Brief (Compls. Br. at 141), the ALJ should adopt Rovi’s proposed construction of this phrase.

Rovi Reply at 52.

The parties have separately requested that the administrative law judge construe the entire phrase “direct the interactive television program guide to cancel a function.” The parties’ proposed constructions for the sub-phrase “direct the interactive television program guide” are actually directed toward the entire phrase. The administrative law judge has determined it is not necessary to construe the sub-phrase when the parties have not proposed separate constructions for the sub-phrase. *Cf. Sulzer Textil, O2 Micro, Biotec Biologische Naturverpackungen, and U.S. Surgical Corp.*

(11) *Cancel a function*

The phrase “cancel a function” appears throughout the claims and specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
stop a function utilizing a signal tuned to by a tuner	termination of a function that is already being performed

See Rovi Br. at 144; Resps. Br. at 174-78, 183 (“This basic logic supports Respondents’ construction, that ‘direct[ing] the interactive television program guide to **cancel a function**’ is to ‘cause the interactive to command **termination of a function that is already being performed.**” (emphasis added)).

Rovi’s entire argument for this term follows:

The phrase “cancel a function” contains the same terms addressed above with respect to the phrase “cancel the function

of the second tuner to permit the second tuner to perform the requested tuning operation.” Thus, the understanding of one of ordinary skill in the art would be the same as discussed with respect to that phrase. CX-0003C (Balakrishnan WS) at Q/A 231.

Rovi Br. at 144.

Comcast presents its arguments for this term along with the “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation” phrase. *See* Resps. Br. at 174-78.

Rovi replies:

Respondents do not separately address these phrases in their Brief, instead grouping their discussion with the term “cancel the function of the second tuner.” For the reasons established in Rovi’s Post-Hearing Brief (Compls. Br. at 144-145), the ALJ should adopt Rovi’s proposed construction of these phrases.

Rovi Reply at 54.

Comcast presents its reply for this term along with the “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation” phrase. *See* Resps. Reply at 56-58.

The administrative law judge previously construed the phrase “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation” to mean “stop a function utilizing a signal tuned to by the second tuner in order to permit

the requested function utilizing a signal tuned to by the second tuner to be performed.”

Thus, the administrative law judge construes the phrase “cancel a function” to mean “stop a function utilizing a signal tuned to by a tuner.”

(12) Direct the interactive television program guide to cancel a function

The phrase “direct the interactive television program guide to cancel a function” appears in claims 1, 9, 13, and 21. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
“direct the interactive television program guide” has its plain and ordinary meaning, where the plain and ordinary meaning is “control the operations of the interactive television program guide to stop a function utilizing a signal tuned to by a tuner”	“cause the interactive [<i>sic</i>] to command termination of a function that is already being performed.”

See Rovi Br. at 141; Resps. Br. at 183.

Rovi’s entire argument for this term follows:

One of ordinary skill in the art would have understood the phrase “direct the interactive television program guide” to

have its plain and ordinary meaning—
 “control the operations of the interactive
 television program guide to stop a
 function utilizing a signal tuned to by a
 tuner.” CX-0003C (Balakrishnan WS) at
 Q/A 225.

Rovi Br. at 141.

Comcast argues:

As discussed above in §§ IX.C.2.e-d, the
 ’512 Patent details that the program
 guide controls the operation of the
 tuners. This basic logic supports
 Respondents’ construction, that
 “direct[ing] the interactive television
 program guide to cancel a function” is to
 “cause the interactive to command
 termination of a function *that is already
 being performed.*” And as shown by the
 claim language, the program guide is
 directed to cancel the function after the
 user makes a selection to resolve the
 conflict. JX-0006 (’512 Patent) at claim 1
 (“provides a user with an opportunity to
***direct the interactive television
 program guide to cancel a function of
 the second tuner*** to permit the second
 tuner to perform the requested tuning
 operation”) (emphasis added).

Similarly, as shown in Fig. 3(b), the user
 can choose to cancel the function of the
 second tuner. RDX-1239 (JX-0006 at Fig.
 3(b) (*e.g.*, element 316)); *see also* RDX-
 1218 (JX-0006 at Figs. 4(b) and 4(c)
 (annotated)) (showing conflict alert

screens when the second tuner of a two tuner system is in use). If the user chooses to cancel the function, the IPG cancels the function that is currently supported by the tuner. *See id.* at Fig 3(b) (element 320, “program guide sends IR commands to stop recording process”).

Resps. Br. at 183-84.

Rovi replies:

Respondents do not separately address this phrase in their Brief, but instead address its construction as part of the phrase, “cancel the function of the second tuner” discussed below. For the reasons established in Rovi’s Post-Hearing Brief (Compls. Br. at 141), the ALJ should adopt Rovi’s proposed construction of this phrase.

Rovi Reply at 52.

Comcast’s reply does not address this phrase. *See generally* Resps. Reply at 50-59.

The administrative law judge previously construed the phrase “cancel a function” to mean “stop a function utilizing a signal tuned to by a tuner.” After excluding this sub-phrase, the parties’ disagreement reduces to the meaning of the word “direct.” Rovi proposes that “direct” means “control” while Comcast proposes that “direct” means “cause.” There is little substantive difference between these words, and the parties do not address them individually. Either “control” or “cause” are acceptable constructions.

Thus, the administrative law judge construes the phrase “direct the interactive television program guide to cancel a function” to mean “control or cause the operations of the interactive television program guide to stop a function utilizing a signal timed to by a tuner.”

(13) Function of the second tuner

The phrase “function of the second tuner” appears only in the claims. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
a function utilizing the signal tuned to by the second tuner	Comcast does not clearly present a construction in its post-hearing brief.

See Rovi Br. at 145; Resps. Br. at 174-78.

Rovi’s entire argument for this phrase follows:

The phrase “function of the second tuner” contains the same terms addressed above with respect to the phrase “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation.” Thus, the understanding of one of ordinary skill in the art would be the same for both phrases. CX0003C (Balakrishnan WS) at Q/A 231.

Rovi Br. at 145.

Comcast presents its arguments for this phrase along with the phrases “cancel a function of the second

tuner to permit the second tuner to perform the requested tuning operation” and “cancel a function” phrase. *See* Resps. Br. at 174-78.

Comcast presents its reply for this term along with the “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation” phrase. *See* Resps. Reply at 56-58.

The administrative law judge previously construed the phrase “cancel the function of the second tuner to permit the second tuner to perform the requested tuning operation” to mean “stop a function utilizing a signal tuned to by the second tuner in order to permit the requested function utilizing a signal tuned to by the second tuner to be performed.”

Thus, the administrative law judge construes the term “function of the second tuner” to mean “a function utilizing the signal tuned to by the second tuner.”

(14) Interactive television program guide implemented on the system, wherein the interactive television program guide is operative to: receive . . . ; determine . . . ; and in response to the determination, display . . .

The phrase “interactive television program guide implemented on the system, wherein the interactive television program guide is operative to: receive . . . ; determine . . . ; and in response to the determination, display . . .” appears only in claim 13.

The full text of the disputed phrase appears in bold, italicized text:

13. A system for resolving a conflict when multiple operations are performed using multiple tuners controlled by an

718a

interactive television program guide, the system comprising:

a first tuner;

a second tuner; and

an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to:

receive a request to perform a tuning operation;

determine that neither the first tuner nor the second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and

in response to the determination, display an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

JX-0006 at 19:41-59.

The parties have proposed the following:

Rovi's Proposed Construction	Comcast's Proposed Construction
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No construction necessary. Individual terms construed elsewhere.	This is a means-plus-function limitation.
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See Rovi Br. at 146; Resps. Br. at 179. Comcast identifies the following functions:

- (1) “receive a request. . .;
- (2) “determine that neither the first tuner nor the second tuner are available . . .,” and
- (3) “in response to the determination, display an alert. . .”

Resps. Br. at 180.¹⁴⁶ Comcast identifies the following structure, as follows:

The only structure relevant to performing the above identified functions is a processor on user equipment, such as a “set top box,” or a “set top box, advanced television receiver with a microprocessor

¹⁴⁶ The full text is:

- (1) “receive a request to perform a tuning operation”
- (2) “determine that neither the first tuner nor the second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation”
- (3) “in response to the determination, display an alert that in response to the determination, display an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation”

and memory, a personal computer with or without one or more tuners, a satellite receiver, a high definition television (“HDTV”) receiver, or any other suitable television reception and data processing device.”

Id.

Rovi’s entire opening argument for this term follows:

No construction is necessary for this claim phrase because the term “interactive television program guide” and each of the functions that follow are construed elsewhere. CX-0003C (Balakrishnan WS) at Q/A 239. Respondents contend that this phrase should be construed as a means-plus-function limitation under § 112, para. 6. Respondents are incorrect for the reasons established in Section VI(K)(1), *infra*.

Rovi Br. at 147. In Section VI(K)(1), Rovi argues that claim 13 is not indefinite, as follows:

Respondents contend that the phrase “interactive television program guide implemented on the system, wherein the interactive television program guide is operative to: receive . . . ; determine . . . ; and in response to the determination, display . . . should be construed as a means-plus-function limitation under 35 U.S.C. § 112(6). But § 112(6) is inapplicable to claim 13, because claim 13 does not use the word “means” and

Respondents admit that the claimed “interactive television program guide” is a definite structure. Respondents construe the term “interactive television program guide,” in claims 1 and 13 to have a definite structure: “application that, when executed, causes television program listings to be presented to the user and enables the user to navigate through the program listings, to select an individual listing, and to select a function associated with the selected listing.” CX-0003C (Balakrishnan WS) at Q/A 238, 240; CDX-0502 (Proposed Constructions); RX-0004C (Bederson WS) at Q/A 49 (opining that Respondents’ constructions are consistent with the understanding of a person of ordinary skill).

Respondents also contends that claim 13 is indefinite for reciting both method and apparatus limitations. RX-0004C (Bederson WS) at Q/A 63. Claim 13, a system claim, does not recite any method claim limitations, *i.e.*, there is no requirement that a method step be performed in order for claim 13 to be infringed. CX-1902C (Balakrishnan RWS) at Q/A 93. Instead, the claims only require that the interactive television program guide (a structure) be “operative to” perform certain functions, **not** that those functions actually be performed. *Id.* In a similar case, the Federal Circuit held that the term “capable of,” when

describing a processor, was insufficient to render an apparatus claim indefinite. *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008).

Rovi Br. at 182-183 (footnote omitted).

Comcast argues:

Claim 13 of the '512 Patent recites “an interactive television program guide implemented on the system, wherein the interactive program guide is operative to: . . .” The term “operative to” is a nonce word and this element of claim 13 should be treated as a means-plus-function element and subject to 35 U.S.C. 112(6). *See Verint Systems Inc. v. Red Box Records Ltd.*, 166 F.Supp.3d 364, 379-383 (S.D.N.Y. Jan. 4, 2016) (holding that claims using “operative” language were subject to analysis as means-plus-function elements). Similarly, a POSITA would understand the term “operative to” to serve a similar purpose to the term “means” in a traditional means-plus-function term. RX-0004C (Bederson WS) at Q/A63. Here, the limitation recites three functions: (1) “receive a request . . . ; (2) “determine that neither the first tuner nor the second tuner are available . . . ;” and (3) “in response to the determination, display an alert . . . [.]” The only structure relevant to performing the above identified functions is a processor on user equipment, such as

a “set top box,” or a “set top box, advanced television receiver with a microprocessor and memory, a personal computer with or without one or more tuners, a satellite receiver, a high definition television (“HDTV”) receiver, or any other suitable television reception and data processing device.” RX-0004C at Q/A 67-69; JX-0006 at 4:54-5:7 (“[e]ach set-top box 112 preferably contains a processor to handle tasks associated with implementing a[n] interactive television program guide application on the set-top box”); 5:20-44;); RX-0847C at Q/A 48.

Rovi argues that means-plus-function treatment should not apply, because the term “means” is not explicitly recited. But this is contrary to modem Federal Circuit Law, which has removed the strong presumption against means-plus-function treatment, and made clear that “when a claim term lacks the word “means,” the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite structure’ or else recites “function without reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1349-50. Claim 13 executes exactly the type of functional claiming that has been prohibited by the Federal Circuit; “implemented on the system,” provides no actual structure. While Rovi argues that the “interactive

television program guide” addresses this issue, this sidesteps the issue. This claim does not recite “an interactive television program guide” that performs functions; in that case, it would purely be software, and would be subject to structural limitations, because that software must run on some hardware. Rather, the claim recites “an interactive television program guide implemented on the system” to perform numerous functions; without a definite structure for “the system,” the claim engages in the prohibited functional claiming. Rovi’s proposed construction - “an integrated assemblage of hardware and/or software elements operating together to accomplish a prescribed end purpose” - underscores the point, by essentially construing the term as hardware and software that performs the function. This is exactly what the Federal Circuit’s opinion on functional claiming seeks to avoid, and why application of § 112(6) is required.

Resps. Br. at 179-181.

Rovi replies:

Respondents contend that, despite lacking the word “means,” this phrase is a means-plus-function term that falls under 35 U.S.C. § 112(6). Resps. Br. at 179-81. Respondents contend that the ALJ should treat claim 13 as a means-plus-function claim term solely because claim 13 uses the words “operative to,”

which Respondents contend are “nonce” words. Resps. Br. at 179 (citing *Verint Systems Inc. v. Red Box Recorders Ltd.* 166 F. Supp. 3d 364, 379-83 (S.D.N.Y. 2016)). Respondents misrepresent the claim language at-issue in the *Verint Systems* case, which is materially (and importantly) different from the operative claim language at-issue here. In *Verint Systems*, the claim required a “computer application operative to . . . access . . . and construct . . .” *Id.* (emphasis added). The court held that this claim was subject to means-plus-function analysis, not because it used the term “operative to” or because “operative to” is a “nonce” word, but, rather, because the term “computer application” was generic and did not recite sufficiently definite structure. *Id.* at 379-80.

The *Virent Systems* case is inapplicable to claim 13 of the ’512 Patent which recites “an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to” “receive,” “determine,” and “display an alert.” JX-0006 at claim 13. Unlike the “computer application” in *Virent Systems* which was entirely undefined and unbounded, an “interactive television program guide” is well-known and well-understood to those of ordinary skill in the art. Compls. Br. at 145; CX-0003C (Balakrishnan WS) at Q/A 236-38; RX-0847C (Bederson WS) at

Q/A 48. And, for the means-plus-function construction rules to apply to claims that do not use the term “means,” Respondents *must* show that “the claim limitation is so devoid of structure that the drafter constructively engaged in means-plus-function claiming.” *Inventio AG v. Thyssentkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1357 (Fed. Cir. 2011).

In an attempt to show that the claimed “interactive television program guide” lacks structure, Respondents contend that it is merely software and the “system” on which it is implemented is not a definite structure. Resps. Br. at 180. As a threshold, this is a new argument that Respondents did not make in their Pre-Hearing Brief (*see* Resps. P.H. Br. at 534-35, 692) and therefore waived. G.R. 7. Regardless, it is indisputable that an “interactive television program guide” (and unlike the “computer application” in *Virent Systems*) is a specific type of application program, as defined by each party in their respective constructions for the ’512 Patent (Compls. Br. at 145) and for other Asserted Patents that also use the phrase “interactive television program guide.” *See e.g. id.* at 42-47 (parties’ each proposing non-means-plus-function constructions for the term “interactive television program guide” and variants thereof in the context of the ’801, ’413,

and '263 Patents). Indeed, and unlike the undefined “computer application” in *Virent Systems*, the “interactive television program guide” of the '512 Patent has a well understood meaning. JX-0006 ('512 Patent) at col. 1, lns. 22-64. It is therefore of sufficiently definite structure to avoid means-plus-function analysis. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015); CX-1902C (Balakrishnan RWS) at Q/A 91.

Rovi Reply at 55-56.

Comcast replies:

Rovi misstates *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). See Compl. PoHB at 182-183. The lack of the term “means” does not create a strong presumption that § 112(6) does not apply, as Rovi contends. *Id.* at 182, n. 24. Rather *Williamson* holds exactly the **opposite** - that the presumption that § 112(6) does not apply to a patent claim that does not use the word “means” **is not strong**. See *Williamson*, 792 F.3d at 1349 (“Our consideration of this case has led us to conclude that such a heightened burden is unjustified and that ***we should abandon characterizing as “strong” the presumption*** that a limitation lacking the word “means” is not subject to § 112, para. 6.”) (emphasis added).

And though claim 13 admittedly lacks the specific term “means,” the entirety of the

claim limitation—“an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to”—recites function, without structure, which amounts to impermissible functional claiming. The cure for functional claims is means-plus-function treatment. And the only structure for an “interactive television program guide implemented on the system . . . referenced in the ’512 is set top box 112 with a processor, or other suitable equipment with similar circuitry, at the user’s premises. RX-0847C at Q/A 46-50.

Resps. Reply at 58-59.

The administrative law judge has determined that the disputed phrase is not a means-plus-function limitation. The administrative law judge has also determined that no construction for this phrase is necessary, as words within the phrase are construed elsewhere. Comcast has not offered any alternative argument apart from its means-plus-function argument.

As an initial matter, Comcast has been able to propose constructions for a host of terms and phrases contained within the claim language it contends invokes § 112, ¶ 6. In particular, Comcast has argued that an “interactive television program guide” is an application. *See also* CX-0003C (Balakrishnan WS) at Q/A 240. Additionally, in another section of its post-hearing brief, Comcast argued:

The asserted claims of the ’512 patent consist of “well-understood, routine,

conventional activity,” and contain nothing to transform them to a patent eligible application. . . . To persons of ordinary skill in the art, the asserted claims are nothing more than implementation of the well-known concept of a “conditional execution’ statement” (*i.e.*, an “if statement”). RX-0004C at Q/A 20. And ***there is little dispute among the parties’ experts that the claims were directed to well-known and standard software and hardware features*** (multiple tuners were known). See Tr. 1175:1-12 (***interactive television program guides and receiving turning requests were known***); RX-0004C at Q/A 21 (alert upon detection of resource conflict was well-known). And in fact, ***recent case law has even found these types of hardware conventional***. See *Tech. Dev. Lic., LLC v. General Instrument Corp.*, 2016 WL 7104253, *6 (N.D. Ill., Dec. 6, 2016) (tuner, remote control, processor).

Resps. Br. at 205 (arguing the asserted claim is patent ineligible under § 101 (emphasis added)). This argument, which Comcast supports with expert testimony and recent case law, shows that words of the claim would have been “understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” See *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348-49 (Fed. Cir. 2015). Further, the evidence shows that the patent discloses known hardware, including set top boxes,

advanced television receivers with microprocessors and memory, personal computers with or without one or more tuners, satellite receivers, and high definition television (“HDTV”) receivers. *See* JX-0006 at 1:21-34, 4:54-5:7, 5:20-44; RX-0004C (Bederson WS) at Q/A 67-69.

(15) Displaying/display

The terms “displaying” and “display” appear in claims 1, 10, 13, and 22 and in the specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
<p>“displaying” means “outputting data that is capable of being shown on a display screen”</p> <p>“display” means “to output data that is capable of being shown on a display screen”</p>	<p>Comcast does not clearly present a construction in its post-hearing brief.</p>

See Rovi Br. at 147; Resps. Br. at 182-83.

Rovi’s entire argument follows:

One of ordinary skill in the art, when reading the terms “display” and “displaying” in light of the claims, the specification, and the file history of the ’512 Patent, would have understood the term “display” in claim 1 to mean “to output data that is capable of being

shown on a display screen” and would have understood the term “displaying” in claim 10 to mean “outputting data that is capable of being shown on a display screen.” CX-0003C (Balakrishnan WS) at Q/A 243. When independent claims 1 and 13 are read together with their dependent claims 10 and 22, respectively, one of ordinary skill in the art would have understood that “displaying” in claims 1, 10, and 22 and “display” in claim 13 refers to the output of data that is capable of being shown on a display screen. CX-0003C (Balakrishnan WS) at Q/A 244.

Rovi Br. at 147.

Comcast’s argument follows:

This plain and ordinary meaning of “presenting/present visually on a screen” should be adopted. This meaning is consistent with the use of the term “display” as it appears in other phrases which require construction. In contrast, Rovi’s construction is nothing but a transparent attempt to allow the asserted claims to read on devices that, by themselves, cannot display anything visually. Tr. 287:16-19 (“Q: The accused set-top boxes, we’re talking about an apparatus, a little box, that box does not actually display anything; correct? It doesn’t show anything? A: It doesn’t have a screen.”)[.] In fact, Dr. Balakrishnan’s own testimony on cross examination renders Rovi’s claim construction

untenable. When questioned about the term “display” as it used in claim 1 (and not in a vacuum), Dr. Balakrishnan admitted that if the user could not visually see the alert, there would be no “opportunity to resolve the conflict,” as required by each of the asserted claims, Tr. 286:12-24[:]

Q. Now, for the purposes of claim 1, why don’t we put up claim 1 in JX-6. It’s a method for resolving conflict. And do you see there’s a determination made and in response to it, you’re displaying an alert that provides a user with an opportunity to direct the guide; right?

A. That is correct.

Q. Okay. And that purpose to allow the user an opportunity to cancel something is not met unless the user can actually see; correct?

A. For the opportunity to — to cancel? Yeah, if I don’t see the alert, then I wouldn’t have the opportunity to cancel it.

Resps. Br. at 182-83.

Rovi replies:

The terms displaying/display, as used in claims 1 and 13, should be construed to mean “to output/outputting data that is capable of being shown on a display screen.” Compls. Br. at 147. Claims 10

and 22 depend from claims 1 and 13, respectively, and add the requirements of displaying the alerts on the display screen. *Id.*

Rovi Reply at 56-57.

Comcast replies:

Rovi fails to grapple with its expert's own testimony, and the plain language of claims 1 and 13, which require "display[ing] an alert that *provides a user with an opportunity to direct the interactive television program guide* to cancel a function of the second tuner." Tr. 286:12-24. If the user cannot see the display, no such opportunity exists. *Id.*

Resps. Reply at 59 (emphasis in original).

The administrative law judge construes "displaying" to mean "presenting" and "display" to mean "present."

The claims require that the interactive television program guide is capable of "**displaying** an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation" (claim 1) and that it is able to "**display** an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation" (claim 13).

Rovi's construction, when substituted into the claim 1, would read:

. . . the method comprising: . . .
 [outputting data that is capable of being
 shown on a display screen] an alert that
 provides a user with an opportunity to
 direct the interactive television program
 guide to cancel a function of the second
 tuner to permit the second tuner to
 perform the requested tuning operation.

See JX-0006 at 18:43-47.

In contrast, substituting the “presenting”
 construction, into the claim 1, would read:

. . . the method comprising: . . .
 [presenting] an alert that provides a user
 with an opportunity to direct the
 interactive television program guide to
 cancel a function of the second tuner to
 permit the second tuner to perform the
 requested tuning operation.

Id. The “presenting” and “present” constructions
 comport with how the terms are used in the context of
 the claims. Neither the claims nor the specification
 require that a set-top box alone visually display the
 alert (as Comcast suggests by arguing that “Rovi’s
 construction is nothing but a transparent attempt to
 allow the asserted claims to read on devices that, by
 themselves, cannot display anything visually.”).
 Indeed, the specification explains the display occurs on
 the television:

During use of the interactive television
 program guide implemented on set-top
 box 112, television program listings and
 other information ***may be displayed on***
television 116. Such interactive

television program guide displays may be overlaid on top of a television program to which the user has tuned with set-top box 112 or may be displayed in place of such a program. Each set-top box 112, VCR 114, and television 116 may be controlled by one or more remote controls 118 or any other suitable user input interface such as a wireless keyboard, mouse, trackball, dedicated set of buttons, voice recognition system etc. Remote controls such as remote control 118 have various buttons that may be pressed by the user such as cursor keys (for on-screen movement of a highlighted region, scrolling functions, etc.), an enter key (for making a selection), channel number keys (for selecting functions related to user preferences), etc.

...

Screen 410 may be displayed by the interactive television program guide on user television 116 when the second or “other” tuner chosen by the interactive television program guide to record the selected program is already in use performing a secondary function such as PIP and the first tuner is being used for viewing television 116.

JX-0006 at 5:20-35, 10:28-34. Thus, one of ordinary skill in the art would have understood that “presenting” something on a television screen includes outputting data necessary for the image.

(16) System

The term “system” appears throughout in claims 13-24 and throughout the specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
“system” has its plain and ordinary meaning, where the plain and ordinary meaning is “an integrated assemblage of hardware and/or software elements operating together to accomplish a prescribed end purpose”	Comcast does not clearly present a construction in its post-hearing brief.

See Rovi Br. at 148; Resps. Br. at 181-82.

Rovi’s entire argument for this term follows:

The term “system” is used only in asserted claims 13 and 22. One of ordinary skill in the art would have understood the term “system” to have its plain and ordinary meaning of “an integrated assemblage of hardware and/or software elements operating together to accomplish a prescribed end purpose.” CX-0003C (Balakrishnan WS) at Q/A 255-56. The specification uses the term “system” to generally describe, among other things, the assemblage of elements in the Figures 1(a) and 2(a) of the ’512 Patent, which includes both user

equipment and non-user only equipment, such as head end equipment. JX-0006 ('512 Patent) at col. 2, lns. 27-30 and col. 2, lns. 34-44; CX-0003C (Balakrishnan WS) at Q/A 256.

Respondents simultaneously contend that the term “system” needs no construction and that it should be construed as “user television equipment (devices designed for viewing or recording television programs, such as set-top boxes, televisions, and VCR’s).” Respondents’ construction is incorrect because there is no plain and ordinary meaning for “system” that is *limited* solely to user television equipment. CX-0003C (Balakrishnan WS) at Q/A 259. And, as discussed with respect to the next term, this dispute is relevant to infringement because Respondents contend—incorrectly and in contravention to the embodiments of Figs. 1(a) and 2(a)—that the “interactive television program guide” must be implemented solely on “the system” which they define as limited solely to “user television equipment” (which in turn is located solely in a user’s home).

Rovi Br. at 148-49 (footnote omitted).

Comcast presents its arguments for “system,” “interactive television program guide,” “interactive television program guide implemented on the system” together. The entire combined argument follows:

The '512 patent is clearly about the use of an IPG resident on "user television equipment" that provides the user the ability to view television programs and set recordings using a VCR. RX-0847C (Bederson RWS) at Q/A 48; JX-0006 ('512 patent) at 1:55-64, 1:22-34 (" . . .[w]hen the selected program begins, the program guide tunes the set-top box to the channel showing the program and directs a videocassette recorder ("VCR") to begin recording. . . ."), 1:48-51 ("It is therefore an object of the present invention to provide an interactive television program guide system which allows a user to record one program while simultaneously watching another program."). The '512 patent also proposes that each user has a user guide equipment that acts as a receiver, such as a STB. JX-0006 at 4:54-5:7 ("Each user has user program guide equipment that acts as a receiver. The user program guide equipment is typically a set-top box such as set-top box 112. . . ."). As is shown clearly in Fig 2(a) of the '512 patent, a POSITA would understand that the STB hosts the program guide and provides "program guide command signals." RDX-1243 (JX-0006 at Fig 2(b) (annotated)) (highlighting the STB (112) with two tuners); RX-0847C at Q/A 49. In addition, the STB provides further commands, via the infrared transmitter to other equipment (*e.g.* a video cassette

recorder). *See* JX-0006 at 6:65-7:7 (“The interactive television program guide command signals on line 212 that are provided to IR transmitter 200 allow channel selection requests and VCR start and record commands to be sent from the interactive television program guide in set-top box 112 to VCR 114. . .”), Fig 2(b) (element 200).

See Resps. Br. at 181-82.

Rovi replies:

Respondents contend that the claim term “system” requires that the claimed system be limited to a system existing entirely on user equipment (which they further contend must be located solely, only, and entirely in the user’s home) by cherry-picking statements from the specification, while ignoring those which do not support their construction. Resps. Br. at 181-82. As Rovi has explained, there is no basis for reading in Respondents’ overly-narrow definition of system, which, were it adopted, would impermissibly exclude disclosed embodiments of the claimed invention. Compls. Br. at 148-149 (Rovi explaining that claimed “system” as shown in Figs. 1(a) and 2(a) is not limited to a system existing only on user equipment, which is located inside a user’s home).

Rovi Reply at 56-57.

Comcast presents its reply for this term along with the “interactive television program guide implemented, on the system, wherein the interactive television program guide is operative to: receive . . .; determine . . .; and in response to the determination, display . . .” and “interactive television program guide on the system” arguments, as follows:

Rovi misstates *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). See Compl. PoHB at 182-183. The lack of the term “means” does not create a strong presumption that § 112(6) does not apply, as Rovi contends. *Id.* at 182, n. 24. Rather *Williamson* holds exactly the **opposite** - that the presumption that § 112(6) does not apply to a patent claim that does not use the word “means” **is not strong**. See *Williamson*, 792 F.3d at 1349 (“Our consideration of this case has led us to conclude that such a heightened burden is unjustified and that ***we should abandon characterizing as “strong” the presumption*** that a limitation lacking the word “means” is not subject to § 112, para. 6.”) (emphasis added).

And though claim 13 admittedly lacks the specific term “means,” the entirety of the claim limitation—“an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to”—recites function, without structure, which amounts to impermissible functional claiming. The cure for

functional claims is means-plus-function treatment. And the only structure for an “interactive television program guide implemented on the system . . .” referenced in the ’512 is set top box 112 with a processor, or other suitable equipment with similar circuitry, at the user’s premises. RX-0847C at Q/A 46-50.

Resps. Reply at 56-58 (emphasis in original).

Comcast has not presented an argument, with sufficient intrinsic or extrinsic support, to warrant construing “system” as “user television equipment.”

The patent uses the word “system” in several different ways. In a broad sense, the patent uses “system” to describe the entire apparatus that distributes television:

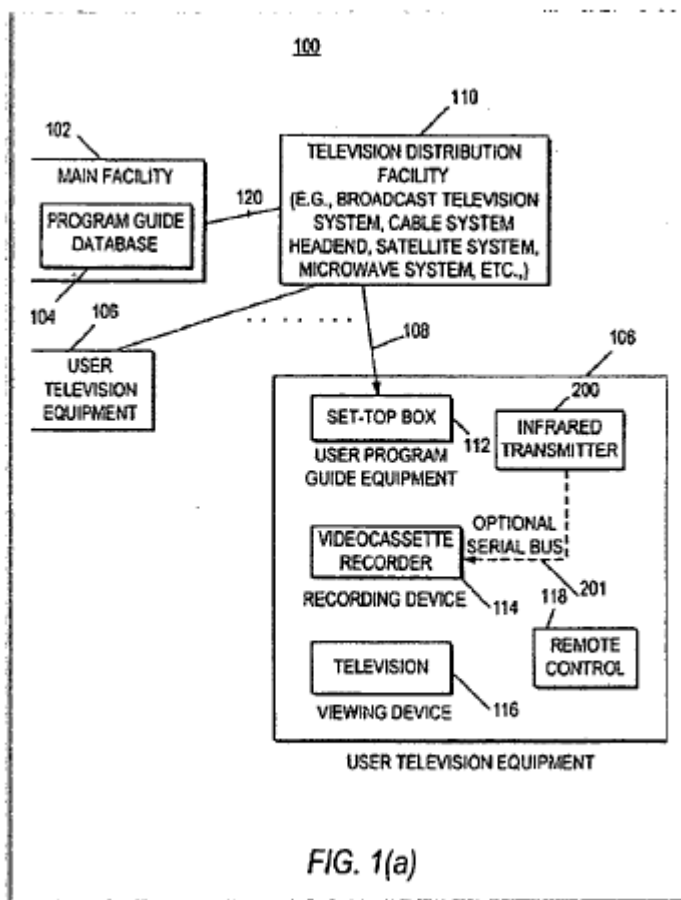
FIG. 1(a) shows *an illustrative interactive television program guide system 100* in accordance with the present invention. Main facility 102 contains a program guide database 104 for storing program guide information such as television program guide listings data, pay-per-view ordering information, television program promotional information, etc. Information from database 104 may be transmitted to multiple television distribution facilities 110 via communications link 120. Only one such facility 110 is shown in FIG. 1 to avoid over-complicating the drawing. Communications link 120 may be a satellite link, a telephone network link, a cable or fiber optic link, a microwave link,

a combination of such links, or any other suitable communication path. If it is desired to transmit video signals over link 120 in addition to data signals, a relatively high bandwidth link such as a satellite link is generally preferable to a relatively low bandwidth link such as a telephone line. Television distribution facility 110 is a facility for distributing television signals and data to users, such as a cable system headend, a broadcast distribution facility, or a satellite television distribution facility.

JX-0006 at 3:62-4:14.

This is Figure 1(a):

743a



In particular, the figure indicates that “user television equipment” (106) is a part of system (100).

The patent also discloses the following systems:

- a “voice recognition system,”
- a “cable system headend,”

- “terrestrial wireless communications systems such as microwave-based communications systems or the like,”
- “conventional broadcast television systems,”
- a “two-tuner set-top box system,”
- a “single-tuner RF-bypass-switch system,” and
- an “interactive television program guide system”

See generally JX-0006. These “systems” indicate that the patent is using the word “system” to describe a collection of components that work together.

Accordingly, the administrative law judge construes “system” to mean “an integrated assemblage of hardware and/or software elements operating together to accomplish a prescribed end purpose.”

(17) Interactive television program guide implemented on the system

The phrase “interactive television program guide implemented on the system” appears only in claim 13. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
“implemented on the system” has its plain and ordinary meaning, where the plain and ordinary meaning is “put into effect on the system”	Comcast does not clearly present a construction in its post-hearing brief.

See Rovi Br. at 149; Resps. Br. at 181-82.

Rovi's argument follows:

“Interactive television program guide implemented on the system” has its plain and ordinary meaning—“put into effect on the system.” CX-0003C (Balakrishnan WS) at Q/A 260.

Respondents contend that this term does not need to be construed; however, should construction be deemed necessary, it should be construed as—“executing on the user television equipment.” CDX-0502 (Proposed Constructions) at 6-7. As with the prior term, Respondents improperly limit the claimed “system” to “user equipment” and further improperly require that the “interactive television program guide” “execute” solely on “user equipment” (in the user's home). CX-0003C (Balakrishnan WS) at Q/A 261. The '512 Patent places no restriction on where, in the claimed system, the “interactive television program guide” must “execute.” JX-0006 ('512 Patent) at col. 2, lns. 27-30 and col. 2, lns. 34-44 (describing Figs. 1(a) and (b)).

Rovi Br. at 149-50.

Comcast presents its arguments for this phrase along with the “interactive television program guide” / “system” terms. *See* Resps. Br. at 181-82.

Rovi replies:

Respondents address this term together with the term “system” and therefore do not separately address either side’s construction for “implemented on the system.” Resps. Br. at 181-82. For the same reasons set forth in Compls. Br. at 149-50 and in Section VII(A)(14), *supra*, Rovi’s construction should be adopted.

Rovi Reply at 57.

Comcast presents its reply for this phrase along with the “interactive television program guide implemented on the system, wherein the interactive television program guide is operative to: receive . . .; determine . . .; and in response to the determination, display . . .” and “system” reply, as follows:

Rovi misstates *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). *See* Compl. PoHB at 182-183. The lack of the term “means” does not create a strong presumption that § 112(6) does not apply, as Rovi contends. *Id.* at 182, n. 24. Rather *Williamson* holds exactly the **opposite** - that the presumption that § 112(6) does not apply to a patent claim that does not use the word “means” **is not strong**. *See Williamson*, 792 F.3d at 1349 (“Our consideration of this case has led us to conclude that such a heightened burden is unjustified and that ***we should abandon characterizing as “strong” the presumption*** that a limitation lacking the word “means” is not subject to § 112, para. 6.”) (emphasis added).

And though claim 13 admittedly lacks the specific term “means,” the entirety of the claim limitation—“an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to”—recites function, without structure, which amounts to impermissible functional claiming. The cure for functional claims is means-plus-function treatment. And the only structure for an “interactive television program guide implemented on the system . . . referenced in the ’512 is set top box 112 with a processor, or other suitable equipment with similar circuitry, at the user’s premises. RX-0847C at Q/A 46-50.

Resps. Reply at 56-58 (emphasis in original).

The administrative law judge has already separately construed the terms “interactive television program guide” and “system.” Thus, the parties disagree on what the word “implemented” means.

As an initial matter, the administrative law judge agrees with Rovi that it is not necessary to construe the term. However, in the alternative, the administrative law judge construes the word “implemented” to mean “put into effect.” As Rovi correctly notes, the ’512 Patent places no restriction on where, in the claimed system, the “interactive television program guide” must “execute.”

(18) A user

The term “a user” appears throughout the claims and specification. The parties have proposed the following constructions:

Rovi’s Proposed Construction	Comcast’s Proposed Construction
“a user” has its plain and ordinary meaning, where the plain and ordinary meaning is “one that uses”	. . . “users,” are users of a STB that watch and record programs.

See Rovi Br. at 150; Resps. Br. at 184.

Rovi’s entire argument for this term follows:

The term “a user” should be interpreted to have its plain and ordinary meaning - “one that uses.” CX-0003C (Balakrishnan WS) at Q/A 262. As with “system,” there is nothing in the intrinsic evidence limiting the meaning of “user” *Id.*

Rovi Br. at 150.

Comcast argues:

As Rovi’s expert testified, the ’512 Patent is directed at alerting a user where both tuners of the set-top box are already in use. Tr. 290:15-25. Thus, the “users,” are users of a STB that watch and record programs. And, of course, the claims themselves require input from a person viewing the television, and that the user is capable of providing responses through the program guide. *Id.* at Cl. 1

(“displaying an alert *that provides a user with an opportunity to direct the interactive television program guide* to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation”) (emphasis added); Cl. 2 (“*receiving a user selection* to not cancel the function of the second tuner; and *in response to the user selection* to not cancel the function of the second tuner, continuing to perform the function of the second tuner”) (emphasis added). It is unclear what Rovi’s construction is intended to do, beyond provide greater flexibility for purposes of alleging infringement.

Resps. Br. at 184 (emphasis in original).

Rovi replies:

Similar to their construction for “system,” discussed at Section VII(A)(14), *supra*, Respondents improperly limit the term “user” to a person who records or watches programs on user television equipment. The term “user” is not so limited and, consistent with its ordinary meaning, means “one that uses.” Compls. Br. at 150.

Rovi Reply at 57.

The administrative law judge has determined that it is not necessary to construe the term “a user.” The patent uses this term in accordance with its plain and ordinary meaning.

3. Representative Products

Rovi accuses two guide systems, the X1 and Legacy systems, of infringing the '512 Patent. Rovi Br. at 150-51.

a) X1 Products

For the X1 products, Rovi argues:

Rovi accuses X1 Guide products of infringing the '512 patent. CX-0003C (Balakrishnan WS) at Q/A 296, 298. The specific "X1 Accused Products" accused in this Investigation with respect to the '512 patent are listed in the Table 1 of the Joint Outline. The representative X1 Accused Product is the ARRIS XG1v3 AX013ANC, but Rovi's proof of infringement applies equally to all accused X1 Guide Products. CX-0003C (Balakrishnan WS) at Q/A 303. With respect to the '512 Patent, and as conceded by Respondents' expert and fact witnesses, each set-top box that runs the X1 Guide works in materially the same way such that minor hardware differences between the various models of X1 Accused Products are irrelevant to whether those products infringe any of the claims of the '512 Patent. Each X1 Guide product that supports the X1 Guide [] CX-0003C (Balakrishnan WS) at Q/A 304-08; JX-0081C (Comcast/ARRIS Master Supply Agreement) at § 9.04; *see also* JX-0096C (Folk Dep. Tr.) 93:17-98:23. Indeed, Comcast witness Albert Garcia confirmed in his testimony at the Hearing that each

X1 Accused Product [] is immaterial to infringement of the '512 Patent. Garcia Tr. 614-15.

Rovi Br. at 150-51. Rovi then argues that Comcast's argument about "the specific 'system-on-a-chip' (SoC) that each product uses" is disingenuous, because the "different models of SoCs do not have any bearing on Rovi's proof of infringement for the '512 Patent." *Id.* at 151.

Comcast's expert did not analyze the various X1 products Comcast contends warrant disparate analysis. Additionally, the exhibit Comcast uses to identify disparate product groups, RX-0870, was created by its counsel and does not contain evidentiary support.

Accordingly, the administrative law judge has determined that Rovi has presented sufficient evidence, and that Comcast has not rebutted this evidence. *See Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1351-52 (Fed. Cir. 2010) ("Appellants contend that the ALJ improperly shifted the burden to Appellants to establish that the non-modeled accused packages would behave differently than those that were modeled. Rather than improper burden shifting, the ALJ properly found that Appellants simply failed to rebut the substantial evidence set forth by Tessera."); *see also TiVo, Inc. v. EchoStar Commc'ns Corp.*, 516 F.3d 1290, 1308 (Fed. Cir. 2008). Thus, the administrative law judge finds that the ARRIS XG1v3 AX013ANC is representative. *See CX-0003C at Q/A 304* ("each product listed in the Corrected Joint ID that supports the X1 Guide [] to all users of any X1-capable product.").

b) Legacy Products

Rovi argues:

Rovi's proof of infringement applies equally to all accused Legacy Guide Products listed in the Corrected Joint ID. CX-0003C (Balakrishnan WS) at Q/A 405. Whatever differences among Legacy devices may exist, they have no impact on how a given set-top box implements the Legacy Guide software, accesses the relevant servers, or alters the user's Legacy Guide experience when using any set-top box running the Legacy Guide software. CX-0003C (Balakrishnan WS) at Q/A 405. This was confirmed by Kirk Davis, who provided an example of the operation of the conflict resolution feature of the Legacy guide (RX-0842C (Davis RWS) at Q/A 19) and testified that [] Davis Tr. 711. The Motorola DCX3501/M (identical to the ARRIS-HD/DVR (Legacy) - MOTRNG200BNMR) is representative of the operation of all Legacy Guide Accused Products determined to be at issue in this Investigation. CX-0003C (Balakrishnan WS) at Q/A 406-08.

Rovi Br. at 152.

As with the X1 guides, Comcast's expert did not analyze the various Legacy products that Comcast contends warrant disparate analysis. Additionally, the exhibit Comcast uses to identify disparate product groups, RX-0870, was created by its counsel and does not contain evidentiary support.

Accordingly, the administrative law judge has determined that Rovi has presented sufficient evidence that the Motorola DCX3501/M is representative and that Comcast has not rebutted this evidence. *See Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1351-52 (Fed. Cir. 2010) (“Appellants contend that the ALJ improperly shifted the burden to Appellants to establish that the non-modeled accused packages would behave differently than those that were modeled. Rather than improper burden shifting, the ALJ properly found that Appellants simply failed to rebut the substantial evidence set forth by Tessera.”); *see also TiVo, Inc. v. EchoStar Commc'ns Corp.*, 516 F.3d 1290, 1308 (Fed. Cir. 2008). Thus, the administrative law judge finds that the Motorola DCX3501/M is representative. *See CX-0003C at Q/A 316* (“each product listed in the Corrected Joint ID that supports the Legacy Guide [] to all users of any Legacy Guide-capable product.”).

4. Literal Infringement

Rovi explains that it “asserts claims 1, 10, 13, and 22 of the '512 Patent. Claim 1 is a method claim and claim 13 is a system claim that essentially mirrors claim 1.” Rovi Br. at 134.

a) Claims 1 and 10

Rovi argues that claim 1 and 10 are “directly infringed when a user performs the claimed method in the United States while using the X1 Guide.” *See Rovi Br. at 152* (citing CX-0003C (Balakrishnan WS) at Q/A 326).

Claim 1 follows:

1. A method for resolving a conflict
when multiple operations are performed

754a

using multiple tuners controlled by an interactive television program guide, the method comprising:

receiving a request to perform a tuning operation;

determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and

in response to the determination, displaying an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

JX-0006 at 18:35-47.

Claim 10 follows:

10. The method of claim 1 wherein the displaying the alert comprises displaying a display screen using the interactive television program guide that provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation.

JX-0006 at 19:28-33.

(1) Claim 1: "First and second tuners"

(a) X1 System

Rovi argues that the X1 system has multiple tuners. Rovi Br. at 152. Rovi relies upon Dr. Balakrishnan's testimony, information from Comcast's website, and photos from Mr. Williams's use of the X1 guide. *Id.* (CX-0003C (Balakrishnan WS) at Q/A 330-58; CX-1654; CX-1629).

Comcast argues that the X1 system does not have at least a second tuner because the X1 system has a Broadcom SoC that that uses "full band capture" technology. Resps. Br. at 188; RX-0846C (Garcia) at Q/A 13. Full band capture collects an entire range of frequencies (0 to 1 GHz) and culls individual channels from the entire range rather than filtering a single analog signal from the spectrum and converting it to a digital signal. RX-0846C at Q/A 14-15; RX-0847C (Bederson RWS) at Q/A 67-73, 81.

The administrative law judge has determined that Rovi has not shown that the accused X1 products literally contain a second tuner.

As an initial matter, Dr. Balakrishnan's testimony does not identify any tuner; rather, he infers that multiple tuners exist because he was "able to simultaneously record five shows" and because a Comcast webpage used the word "tuner." *See, e.g.*, CX-0003C at Q/A 332-35; *but see* RX-0846C (Garcia RWS) Q/A 20-21; RX-0847C (Bederson RWS) at Q/A 106-109 (the reference to "tuners" is a reference to virtual tuners).

Further, Dr. Balakrishnan does not point to schematics or owners manuals for the accused representative product, the ARRIS XG1v3 (AX013ANC), to identify a second tuner. *Compare id.*

with CX-0004C (Delp WS) at Q/A 189 (for the '871 Patent, Dr. Delp relied upon CX-1305C (Pace-XG1v3 Multi-Tuner Video Gateway), CX-1353C (XG1v3 Main Board Schematic), and CX-1317C (Comcast-HW Specification for XG 1 and XG2 STB Products) in identifying a processor). Although Dr. Balakrishnan points to a MG1 data sheet, CX-1304, the evidence shows that those set-top boxes were never sold to Comcast and that the “multi-tuner” reference is anachronistic terminology that has been carried forward to the full band capture era. *See* RX-0855C (Folk) at Q/A 4-5 (Mr. Folk also explains that the MG1 does not have multiple physical tuners.).

Additionally, Dr. Balakrishnan discusses the SoC only when asked about Comcast’s arguments. *See, e.g.*, CX-0003C at Q/A 345. Dr. Balakrishnan then speculates that because the four Q/AM demodulators depicted in the SoC act like tuners, “there ***could be*** four different circuits within the ‘digital tuning’ rectangle, which happen to not be shown in the Broadcom figure, but which ***could exist*** within that rectangle.” *Id.* at Q/A 347 (emphasis added).¹⁴⁷ Dr. Balakrishnan’s testimony contains too much doubt to conclude that it is more likely than not that the SoC literally has first and second tuners.

Thus, Rovi has not shown that the accused X1 products literally contain a second tuner.

(b) Legacy System

Rovi argues:

¹⁴⁷ Rovi’s Brief echoes this uncertainty. Rovi Br. at 158 (“each “tuner” ***could*** comprise . . .” (emphasis added)).

The accused Legacy Guides have two tuners under the parties' respective constructions and therefore have "multiple tuners," as stated in the preamble of claim 1; the Legacy Guides do not use a "full band capture" RF Front End, like the X1 devices. CX-0003C (Balakrishnan WS) at Q/A 410 13; Davis Tr. 701-03; CX-1288C (DCX3501-M Dual Tuner Datasheet); CX-1600 (Legacy Screenshots for the '512 Patent) at 4.

Rovi Br. at 165-66.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(E)(2).

The administrative law judge has determined that the evidence shows that the accused Legacy products have first and second tuners. *See* CX-0003C (Balakrishnan WS) at Q/A 410 13; Tr. (Davis) 701-703; CX-1288C (DCX3501-M Dual Tuner Datasheet); CX-1600 (Legacy Screenshots for the '512 Patent) at 4.

(2) Claim 1: "Interactive television program guide"

(a) X1 System

Rovi argues:

Claims 1 and 13 further refer to an "interactive television program guide." The accused X1 Guide includes an interactive television program guide under both Rovi's and Respondents' proposed constructions, as Dr. Balakrishnan opined. CX-0003C (Balakrishnan WS) at Q/A 356-357.

There is evidence of the interactive guide in the source code that operates with the X1 Guide devices. *See* CX-1698C (Comcast's Source Code Range) at COMC_ITC1001_SC-002193, line 8419 (Guide.java, function manageTuner) (including code depending on Guide.java and code on which Guide.java depends); CX-0003C (Balakrishnan WS) at Q/A 357. There are also a number of documents that demonstrate the presence of the interactive television guide. CX-0003C (Balakrishnan WS) at Q/A 357. And CX-1629 (X1 Screenshots for the '512 Patent), at 1-7, shows screenshots of the interactive television program guide running on the X1 Accused Products.

Rovi Br. at 160.

Comcast's arguments about the "interactive television program guide" are directed to claim 13, *see* Resps. Br. at 199, which are addressed separately. Comcast does not rebut this argument for claim 1. *See generally* Resps. Br., Section IX(E)(1); Resps. Reply, Section VII(D)(1).

The administrative law judge has determined that the X1 products satisfy the "interactive television program guide" limitation of claim 1, as the method is performed using an interactive television program guide.

(b) Legacy System

Rovi argues:

The accused Legacy Guides also have an interactive television program guide under both side's constructions. CX-0003C (Balakrishnan WS) at Q/A 415, 416; CX-1600 (Legacy Screenshots for the '512 Patent) at 1.

Rovi Br. at 166.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(E)(2).

The administrative law judge has determined that the evidence shows that the accused Legacy products satisfy the "interactive television program guide" limitation, as the method is performed using an interactive television program guide. *See* CX-0003C (Balakrishnan WS) at Q/A 415, 416; CX-1600 (Legacy Screenshots for the '512 Patent) at 1.

(3) Claim 1: "Receiving a request"

(a) X1 System

Rovi argues:

Claim 1 recites a first step of "receiving a request to perform a tuning operation" and claim 13 recites an "interactive television program guide" that is operative to "receive a request to perform a tuning operation." Dr. Balakrishnan used the X1 Guide device and witnessed it receive his request to perform a tuning operation, such as viewing and/or recording a program. CX-0003C (Balakrishnan WS) at Q/A 361-62; CX-1629 (X1 Screenshots for the '512 Patent) at 1 (illustrating how the interactive

television program guide in the X1 Accused Products receives a request to perform a tuning operation).

Rovi Br. at 160.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(E)(1). The administrative law judge has determined that the evidence shows that the accused X1 products satisfy the “receive a request to perform a tuning” limitation. *See* CX-0003C (Balakrishnan WS) at Q/A 361-62; CX-1629 (X1 Screenshots for the ’512 Patent) at 1 (illustrating how the interactive television program guide in the X1 Accused Products receives a request to perform a tuning operation).

(b) Legacy System

Rovi argues:

The Legacy Guide products, when used, “receive a request to perform a tuning operation” under both side’s constructions for “tuning operation.” CX-0003C (Balakrishnan WS) at Q/A 417.

Rovi Br. at 166.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(E)(2).

The administrative law judge has determined that the evidence shows that the accused Legacy products satisfy the “receive a request to perform a tuning” limitation. *See* CX-0003C (Balakrishnan WS) at Q/A 417.

(4) Claim 1: “Determining neither tuner is available”

(a) X1 System

Rovi argues that there are two tuners because “[g]iven that, under either party’s construction, there are multiple tuners in the X1 Guide device, there must be a first tuner and a second tuner in the accused X1 Guide devices.” Rovi Br. at 161. Rovi then argues:

The accused X1 Guide devices further perform the step of “determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation.” *Id.* at Q/A 372. Applying both side’s constructions, if all five tuners in the X1 Guide devices are currently tuned to five programs which are also being recorded, then all five tuners are unavailable, *i.e.*, they cannot perform the requested tuning operation (Rovi’s construction) and are “in use” (Respondents’ construction). *Id.* at Q/A 372-76. The X1 Guides determine that neither the first nor the second tuner is available, as demonstrated by the alert display which informs the user of this fact. CX-1629 (X1 Accused for the ’512 Patent) at 2, 3.

Id. With regard to the language requiring that the tuners “are both capable of performing the requested tuning operation,” Rovi argues “[b]ecause there are five tuned-to channels, it follows that there are five tuners that are capable of performing the user’s requested tuning operation, *i.e.*, tuning to a requested channel to view and/or record the program.” *Id.*

Comcast argues that a cable card imposes a rule on the SoC that limits the number of programs a user can watch or record and that:

This rule regarding the maximum number of programs the cable card can handle is unrelated to any alleged “tuners.” Allowing the “determining” limitation to be satisfied by a rule that is unrelated to tuners, would eviscerate the claim language “neither a first tuner nor a second tuner are available.” And it would ignore the purpose of the invention - to avoid tuner conflicts. Under this logic, any function that resulting in an appropriate alert, as recited in the next limitation, would satisfy the “determining” step.

Resps. Br. at 192 (citing RX-0846C at Q/A 24-26; RX-0847C (Bederson RWS) at Q/A 38, 94; Tr. 624-630).

The administrative law judge previously determined that Rovi has not shown that the accused X1 products literally contain a second tuner. Accordingly, Rovi cannot show that the accused X1 products determine that the second tuner is not available, and the “determining” limitation is not satisfied.

However, in the event that it is later determined that the X1 products satisfy the second tuner limitation, then the administrative law judge has determined that the accused X1 products satisfy the “determining” limitation. In particular, the evidence shows that the X1 system determines that two tuners (out of five, due to the limits imposed by the cable card) are not available to perform a requested operation

(e.g., watching or recording another program). *See* CX-0003C at Q/A 366-68. Claim 1 is not limited one specific algorithm, process, or structure that dictates the two tuners' availability or capability to perform the requested operation, as Comcast suggests. The evidence shows that the X1 system determines that the tuners are not available because the system displays an alert showing that "All Tuners Are in Use." *See id.* at Q/A 375; CX-1629 at 3.

(b) Legacy System

Rovi argues:

The Legacy Guides meet this limitation whenever the tuned-to signals of the two tuners in a Legacy Guide are being used to record programs and a user tunes to a different program that is not being recorded to either view or record the tuned-to signal. *Id.* at Q/A 418; Davis Tr. 709; CX-1600 (Legacy Screenshots for the '512 Patent) at 2, 4.

Rovi Br. at 166.

Comcast argues:

The Accused Legacy STBs do not determine that "neither a first tuner nor a second tuner are available" under either party's construction. The only logical reading of both parties' constructions, is that the tuners "cannot perform the requested tuning operation" (under Rovi's construction) or are "in use" (Respondents' construction) any time the tuners are occupied, for example, by either recording or displaying a program.

Otherwise, the limitation is rendered meaningless, because “available,” is simply expanded to read on rules, and no longer addresses the tuner conflicts, which even Dr. Balakrishnan agrees is the stated purpose of the invention.

Comcast’s Legacy STBs do not “determine that neither a first tuner nor a second tuner,” because they do not determine that the tuners “cannot perform the requested tuning operation,” or are “in use” in all cases. For example, if the user is recording a first program on channel 5, and watching a second program on channel 6, both tuners are occupied. But, the user is permitted to change the channel to watch channel 7. Rather, the accused alerts only arise when a user sets two simultaneous recordings. And the system’s only determination is that two recordings are in progress, not that both tuners are not available.

Resps. Br. at 199-200.

Comcast’s reply follows:

Rovi’s Post Hearing Brief speaks volumes. According to Rovi, the Legacy STBs determine a conflict “whenever the tuned to signals of the two tuners in a Legacy Guide ***are being used to record programs.***” Compl. PoHB at 166. The accused alert does not occur whenever the tuners are “not available,” for example when one tuner is used to

record, and the other is used to display a program. Rather, Rovi attempts to read the claims of the '512 patent on the application of a rule that provides an alert when two simultaneous recordings are set. This cannot satisfy either parties' [sic] construction for the "determining" limitation. Resp. PoHB at 199-200. And it, has nothing to do with the purpose of the invention, as stated by Rovi's own Dr. Balakrishnan. Tr. 297:7-13; RX-0847C (Bederson RWS) at Q/A 93 (discussing Balakrishnan deposition testimony).

Resps. Reply at 67. Dr. Bederson's testimony, RX-0847C at Q/A 93, is specific to the X1 system. The cited transcript testimony follows:

Q. All right. So every reference to an alert occurring in the patent, in the drawings, in the specification, in the provisional application, is when all of the tuners are in use or busy; isn't that true?

A. "The references we have just gone through, yes. But I will not make a statement saying every single reference.

Tr. 297.

The administrative law judge has determined that the evidence shows that the accused Legacy products meet this limitation. Rovi supports its argument with expert testimony and pictures showing the Legacy guide in operation. See CX-0003C at Q/A 418; Tr. (Davis) 709; CX-1600 (Legacy Screenshots for the '512 Patent) at 2, 4. Comcast's brief does not cite any evidence, while its reply cites evidence that does not

discuss the any accused products (Tr. 297) and testimony for the wrong products (RX-0847C (Bederson RWS) at Q/A 93, discussing the accused X1 products). *See* Resps. Reply at 64. Accordingly, the accused Legacy products satisfy this limitation.

*(5) Claim 1: “Displaying an alert” and
“opportunity to cancel”*

(a) X1 System

Rovi argues that the X1 guides display the required alert. Rovi Br. at 163-64.

Comcast’s brief reargues the claim constructions and alleges that Dr. Balakrishnan does not have any evidence of any customers performing the process he used to conclude the accused X1 products infringe. Comcast also argues that the set-top boxes do not infringe because the “Comcast X1 STBs do not have a screen on which the user sees an alert to cancel a function.” *Id.* at 198.

Rovi’s reply points to evidence that customers used the accused X1 products in an infringing manner. *See* Rovi Reply at 62, n.6 (“RX-0839C (Nush RWS) at Q/A 10-11 (Comcast employee Mr. Nush testifying that [] of Comcast users of the X1 Accused Products have seen the ‘Accused Screen’—*i.e.*, the conflict alert screen—which must necessarily have been displayed on a display device connected to an X1 Accused Product).”).

The administrative law judge has determined that the X1 system, as used by Comcast customers, satisfies this limitation. The evidence shows that the X1 system displays an alert that allows the user to cancel a function of the second tuner. *See* CX-0003C (Balakrishnan WS) at Q/A 379-90; CX-1629 (X1 Screenshots for the ’512 Patent). Comcast’s argument

about the screen misses the point of Rovi's allegation, that claim 1 "is directly infringed when a user performs the claimed method in the United States while using the X1 Guide." Rovi Br. at 152.

(b) Legacy System

Rovi argues:

In response to the determination, the interactive television program guide on the Legacy Guide set-top box outputs an alert that provides a user with an opportunity to direct the interactive television program guide to stop a function of the second tuner (and even the "last allocated" tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 419; CX-1600 (Legacy Screenshots for the '512 Patent) at 4; RX-0842C (Davis RWS) at Q/A 19; Davis Tr. 711-13.

This alert "provides the user with an opportunity to direct the interactive television program guide" to "Swap to view your other recording," to "Continue recording, don't change channel," or to "Stop recording, change channel." CX-0003C (Balakrishnan WS) at Q/A 419. The first two options, to swap views or to continue recording and dismiss the alert, have the expected outcomes. *Id.* By choosing the "swap" option, the user can select the first or last allocated tuner to cancel (choosing to swap to the last allocated tuner for canceling would meet

this limitation under Respondents' construction). *Id.*

If selected, the option "Stop recording, change channel" constitutes a direction to "cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation." CX0003C (Balakrishnan WS) at Q/A 419; Davis Tr. 710.

Rovi Br. at 166-67.

Comcast argues that the accused Legacy products do not provide an alert "in response to the determination" because in the Legacy guide an "alert condition is provided in response to a rule (both tuners used for recording), and not the claimed condition (both tuners are not available)." Resps. Br. at 200. Comcast also argues that the set-top boxes do not infringe because "Comcast Legacy STBs do not include a screen (*e.g.*, TV) to display an alert." *Id.* at 201.

Rovi replies that Comcast's "scenario is irrelevant to infringement—Rovi has shown that in the Legacy Guide Accused Products when both the first and the second tuner are both unavailable to perform the requested tuning operation an alert screen is displayed to the user (just as the claims of the '512 Patent require)." Rovi Reply at 63.

The administrative law judge has determined that the accused Legacy products satisfy this limitation. The evidence shows that the alert is displayed when the tuners are not available for recording and a user can cancel a function from the alert. *See* CX-0003C at Q/A 419; CX-1600 (Legacy Screenshots for the '512 Patent) at 4; RX-0842C (Davis RWS) at Q/A 18-19; Tr.

(Davis) 711-713. Comcast's argument about the screen misses the point of Rovi's allegation, that claim 1 "is directly infringed when a user performs the claimed method in the United States while using the Comcast Legacy Guide." *See* Rovi Br. at 165.

(6) Claim 10

Claim 10 requires that the alert "provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation." JX-0006 at 19:28-33.

(a) X1 System

Rovi argues:

Claim 10 depends from claim 1 and claim 22 depends from claim 13; both add the requirement that displaying the alert comprises displaying a display screen using the interactive television program guide that provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation.

The alert that is shown on the television screen meets both claims 10 and 22, because it provides the user with two options: (1) "Keep Recording," which, if selected, would prevent the X1 Guide from performing the requested tuning operation and continue to perform the function of the second tuner; or (2) "Change Channel" which would cause the

X1 Guide to stop recording the program currently being tuned to by the second tuner and instead tune to and view the requested program. CX-1629 (X1 Screenshots for the '512 Patent) at 3.

Rovi Br. at 165.

Comcast does not directly address or rebut Rovi's arguments about claim 10. *See generally* Resps. Br., Section IX(E)(1).

The administrative law judge has determined that the evidence shows that the accused X1 products literally infringe claim 10, provided that the accused X1 products infringe claim 1. *See* CX-1629 (X1 Screenshots for the '512 Patent) at 3; *see also* CX-0003C at Q/A 394-95 (discussing infringement of claim 10); *Ferring*, 764 F.3d at 1411.¹⁴⁸

(b) Legacy System

Rovi argues:

The displayed screen provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 421; RX-

¹⁴⁸ In *Ferring*, the Federal Circuit found a dependent claim not infringed because its corresponding independent claim was not infringed. *Ferring B.V. v. Watson Labs., Inc.-Florida*, 764 F.3d 1401, 1411 (Fed. Cir. 2014) ("Because we hold that the asserted independent claims of Ferring's patents are not infringed, the asserted dependent claims are likewise not infringed.")).

0842C (Davis RWS) at Q/A19; Davis Tr. 709-10.

Rovi Br. at 167.

Comcast does not directly address or rebut Rovi's arguments about claim 10. *See generally* Resps. Br., Section IX(E)(2).

The administrative law judge has determined that the evidence shows that the accused Legacy products literally infringe claim 10, provided that the accused Legacy products infringe claim 1. *See* CX-0003C (Balakrishnan WS) at Q/A 421; *Ferring*, 764 F.3d at 1411.

b) Claims 13 and 22

Rovi argues that "Claim 13 essentially mirrors claim 1 and, as a system claim, is infringed when the accused devices are (or were) imported into the United States, and/or when they are made, used, or sold in the United States, by Comcast, ARRIS, and/or Technicolor." Rovi Br. at 152 (citing CX-0003C (Balakrishnan WS) at Q/A 397).

Claim 13 follows:

13. A system for resolving a conflict when multiple operations are performed using multiple tuners controlled by an interactive television program guide, the system comprising:

- a first tuner;
- a second tuner; and
- an interactive television program guide implemented on the system, wherein

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the interactive television program guide is operative to:

receive a request to perform a tuning operation;

determine that neither the first tuner nor the second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and

in response to the determination, display an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

JX-0006 at 19:41-59.

Claim 22 follows:

22. The system of claim 13 wherein the displaying the alert comprises displaying a display screen using the interactive television program guide that provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation.

JX-0006 at 20:47-52.

(1) Claim 13: “Interactive television program guide implemented on the system”

(a) X1 System

Rovi argues:

Claims 1 and 13 further refer to an “interactive television program guide.” The accused X1 Guide includes an interactive television program guide under both Rovi’s and Respondents’ proposed constructions, as Dr. Balakrishnan opined. CX-0003C (Balakrishnan WS) at Q/A 356-357. There is evidence of the interactive guide in the source code that operates with the X1 Guide devices. *See* CX-1698C (Comcast’s Source Code Range) at COMC_ITC1001_SC-002193, line 8419 ([] CX-0003C (Balakrishnan WS) at Q/A 357. There are also a number of documents that demonstrate the presence of the interactive television guide. CX-0003C (Balakrishnan WS) at Q/A 357. And CX-1629 (X1 Screenshots for the ’512 Patent), at 1-7, shows screenshots of the interactive television program guide running on the X1 Accused Products.

Rovi Br. at 160.

Comcast argues that the accused X1 set-top boxes do not [] Resps. Br. at 199.

In CX-0003C at Q/A 294 (emphasis added), Dr. Balakrishnan identified the accused products, as follows:

Q294. Can you identify the products accused by Rovi of infringing the '147 patent and the '512 patent in this case?

A294. Yes. On pages 1-2 of the Corrected Joint ID, there is a description. Based on what it says here, it is my understanding that, with respect to the '512 patent and the '147 patent, ***Rovi is accusing set-top boxes*** made for Comcast, to Comcast's design specifications, by Arris and Technicolor, that run Comcast's Legacy Guide, which I will refer to as the "Legacy Guide" or Comcast's X1 Guide, which I will refer to as the "X1 Guide," and otherwise meet the legal requirements of importation, sale, lease, etc. to Comcast or Comcast's customers in the U.S., which includes. . .

Dr. Balakrishnan then quotes the Corrected Joint ID, JX-0084C (Amended Joint Identification of Accused Products), as follows:

all products capable of supporting Comcast's X1 or Legacy Guide, that are or were: (1) products purchased by Comcast on or after April 1, 2016, regardless of when they were imported; (2) products installed by Comcast into its customer base on or after April 1, 2016, regardless of when they were purchased by Comcast or imported; and (3) products that

Comcast now holds in inventory and that Comcast will, in the normal course of business, install into Comcast's customer base on or after April 1, 2016, regardless of when they were purchased by Comcast or imported. The foregoing includes remote controls and applications that operate in conjunction with any of the identified models.

Id. (quoting JX-0084C at 1-2). Neither Rovi nor Dr. Balakrishnan has explicitly included Comcast's servers as an accused product. *See id.* (even if the servers were identified, no evidence showing when they were purchased, installed, imported, or held in inventory is cited).

Dr. Balakrishnan then provides testimony about the system in CX-0003C at Q/A 397-400. In Q/A 398-400, Dr. Balakrishnan opined, as follows:

Q398. Other than the issue of the term "system" and the means-plus-function issue, do you have infringement opinions regarding the remaining limitations of claim 13?

A398. Yes, all of my infringement opinions that I have already discussed with respect to infringement of claim 1 by the X1 Guide device are equally applicable to claim 13.

Q399. Okay. Good. Then we can discuss the issue over the term "system"; what is the issue regarding the term "system"?

A399. Comcast contends that the interactive television program guide is implemented [] which are not part of any of the user's television equipment. Claim 13 requires that the interactive television program guide is implemented "on the system." Rovi contends that the "system" is an assemblage of elements, and that assemblage includes the [] Therefore the limitation of claim 13 that the interactive television program guide is implemented on the system is met in the X1 guide, regardless of whether the interactive television program guide is implemented only on the user's equipment, on both the user's equipment and the head end servers, or only on the head end servers, because all are part of the system, under Rovi's construction.

Q400. So, what is your opinion on the infringement of claim 13 by the accused X1 Guide devices?

A400. Claim 13 is also infringed by the accused X1 Guide devices, for the reasons I have already discussed.

Dr. Balakrishnan's statement that "Rovi contends that the 'system' is an assemblage of elements, and that assemblage includes the [] conflicts with the Corrected Joint Identification of Accused Products (CX-1702C), which does not identify the []

Dr. Bederson testified that the X1 guide is implemented on Comcast's servers, not on the set-top box. *See* RX-0847C (Bederson RWS) at Q/A 113:

Q113. Well, why can't Comcast's X1 System qualify as an "an interactive television program guide implemented on the system" under Respondents' construction?

A113. Because, the Comcast X1 program guide is [] as I have previously testified in response to Q51-Q64.

See also id. at Q/A 115. Thus, the evidence shows that Rovi has not shown that the accused X1 products literally infringe claim 13.

(b) Legacy Products

Rovi argues:

The interactive television program guide is [] which is user equipment, so there is no dispute that the claim limitations of "system" and "implemented on the system" requirements are met even under Respondents' constructions. CX-0003C (Balakrishnan WS) at Q/A 424, 403.

Rovi Br. at 167.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(E)(2).

The administrative law judge has determined that the evidence shows that the accused Legacy products infringe claim 13 (under either party's proposed constructions). *See* CX-0003C (Balakrishnan WS) at Q/A 424 (Q/A 403, which is also cited, pertains to the X1 products).

(2) Claim 22

(a) X1 System

Rovi jointly addresses claims 10 and 22 for the accused X1 products. *See* Rovi Br., Section VI(E)(2). Comcast does not directly address or rebut Rovi's arguments about claim 10 or 22. *See generally* Resps. Br., Section IX(E)(1). Thus, the administrative finds claim 22 is infringed for the same reasons claim 10 is infringed.

(b) Legacy System

Rovi jointly addresses claims 10 and 22 for the accused Legacy products. *See* Rovi Br., Section VI(F)(2). Comcast does not directly address or rebut Rovi's arguments about claim 10 or 22. *See generally* Resps. Br., Section IX(E)(2). Thus, the administrative finds claim 22 is infringed for the same reasons claim 10 is infringed.

c) Proposed Alternative Designs

Comcast's entire argument is:

Comcast has proposed two design alternatives for the '512 patent that are ripe for adjudication by the ALJ. The software is fixed and was produced before the close of discovery for inspection (RX-0327C; Tr. 734:10-12) and each of the parties' experts have been able to assess whether these alternative designs infringe. *See Flash Memory* at 19-25. Rovi, nor its experts, have expressed any infringement theory as to either of these alternative designs.

The first design simply provides an alert screen when the user has reached their

max set of recorded or viewed programs, but does not provide the user the ability to “cancel a function of the second tuner,” (or cancel any function). RX-0847 (Bederson RWS) at Q/A 121; RDX-1277; RX-0839C (Nush RWS) at Q/A 5-6. This design alternative has been confirmed as suitable by relevant Comcast personnel. RX-0839C at Q/A 7, 10-11; Tr. 719:20-720:6, 734:18-24.

The second alternative design [] RX-0839C at Q/A 8. This is considered an acceptable alternative, because it is already used by X1 platform when customers set more than the allowed number of recordings. *Id.* at Q/A 9-11; Tr. 720:25-722:14 (in part, “A That’s correct. There are situations in the product today where that behavior is the current customer experience.”), 734:18-24.

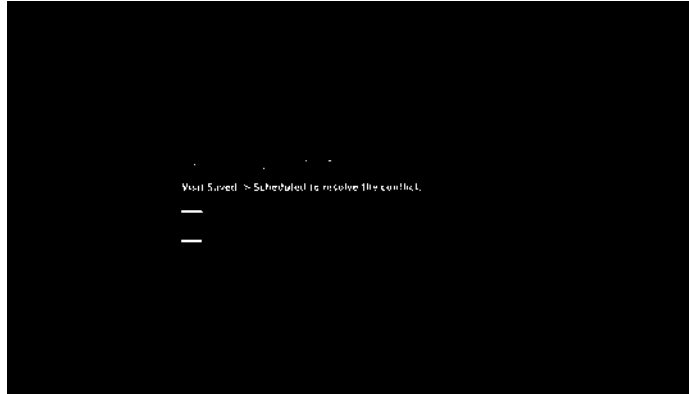
Resps. Br. at 201-02.

Rovi argues that the “proposals are improper, hypothetical, non-infringing alternatives under the controlling case law, because Comcast has not actually implemented either alternative.” Rovi Br. at 168. Rovi notes that “Comcast has done no testing to determine whether its users would actually accept either of these proposed alternatives.” *Id.*

The administrative law judge has determined that the first alternative design, which appears to be for the X1 system only based on its visual appearance, would not infringe and that the second alternative design is too hypothetical to adjudicate.

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For the first alternative design, Comcast cites the following screen shot for the first alternative design:



RX-0839C (Nush RWS) at Q/A 6. Mr. Nush testified that “the options to ‘keep recording’ and ‘change channel,’ which were shown in the previous design [the “All Tuners Are in Use” screen] [] *Id.* In this design, the X1 guide, as used by Comcast’s customers, [] Thus, the first alternative design, which is limited to the X1 guide, does not infringe claims 1 or 13.

For the second alternative design, Mr. Nush testified that [] RX-0839C (Nush RWS) at Q/A 8. This alternative design is too hypothetical to adjudicate because there is no evidence that the proposed design is a finalized product or sufficiently described for consideration by the Commission.

d) Conclusions

In sum, the administrative law judge has determined that:

- the accused X1 products do not infringe claims 1, 10, 13, and 22;
- Comcast’s first alternative design does not infringe claims 1, 10, 13, and 22; and

- the accused Legacy products infringe claims 1, 10, 13, and 22.

5. Indirect Infringement

In the event that the accused X1 or Legacy products are found to infringe the '512 Patent, the administrative law judge has analyzed Rovi's inducement and contributory infringement arguments.

a) Knowledge of the '512 Patent and Specific Intent to Infringe

The administrative law judge finds that Comcast had the requisite knowledge of the '871 Patent for the same reasons provided in the discussion of the '556 Patent above. *See* Section IV(A)(5)(a). In general, as with the '556 Patent, Rovi argues that Comcast induces its customers to infringe by instructing them how to use the X1 or Legacy systems and that Comcast induces ARRIS and Technicolor by having them make and import set-top boxes into the United States. *See* Rovi. Br. at 168-69.

b) Induced Infringement of the '512 Patent

(1) X1 System

Rovi has shown that a small portion of customers utilize the accused X1 products in an infringing manner. *See* Rovi Reply at 63-64 n.7 (citing RX-0839C (Nush RWS) at Q/A 10-11 for the fact that [] of Comcast's X1 users "have been presented with the recording conflict alert screen as part of their ordinary use of the X1 Accused Products."). However, Rovi has not shown that Comcast instructs, directs, or advises its users on how to carry out direct infringement of the

asserted claims. *See* Resps. Br. at 202 (“Nothing that Rovi cites shows any instruction on how to perform the techniques that allegedly infringe the ’512 patent.”). In particular, Rovi has not shown that Comcast intends to instruct its users to schedule enough recordings to cause a conflict that would trigger infringement. Thus, Rovi has not shown that it was Comcast’s intent to “‘bring about the desired result,’ which is infringement.” *See Commil USA*, 135 S.Ct. at 1928.

Accordingly, Rovi has not met its burden of showing that Comcast induces its users to infringe the ’512 Patent.

(2) Legacy System

Rovi has not sufficiently shown that customers actually utilize the accused Legacy products in an infringing manner (*e.g.*, there are no corresponding statistics to the Nush statistics cited for the X1 system that show tuner conflict resolution, *see* RX-0839 at Q/A 10-11). *See Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1033-34 (Fed. Cir. 2002) (explaining the rule that “[u]pon a failure of proof of direct infringement, any claim of inducement of infringement also fails” and then reversing summary judgment of no infringement based upon evidence that the defendant demonstrated the product to prospective buyers).

c) Contributory Infringement of the ’512 Patent

To prevail on a contributory infringement claim, a complainant must show that, *inter alia*, the accused product is “not a staple article or commodity of commerce suitable for substantial noninfringing use[.]” *See* 35 U.S.C. § 271(c); *Fujitsu*, 620 F.3d at 1326

(“To establish contributory infringement, the patent owner must show the following elements relevant to this appeal: 1) that there is direct infringement, 2) that the accused infringer had knowledge of the patent, 3) that the component has no substantial noninfringing uses, and 4) that the component is a material part of the invention.”).¹⁴⁹

(1) X1 System

The administrative law judge has determined that Rovi has fallen short of meeting its burden of showing that the accused products have no substantial non-infringing uses; rather, the evidence shows that the accused products have many substantial non-infringing uses, such as watching television programs or recording less than the maximum number of permitted recordings (*e.g.*, in the accused X1 products, recording three shows simultaneously does not infringe the '871 Patent). *See* RX-0839C (Nush RWS) at Q/A 4-11 (explaining [] of X1 subscribers ever see the alert screen relating to tuner limitations).

(2) Legacy System

Rovi does not advance a separate argument for the accused Legacy products. *See generally* Rovi Br., Section VI(I). Comcast has not cited separate evidence for the accused Legacy products. *See generally* Resps. Br., Section IX(E)(5). Accordingly, the administrative law judge has determined that Rovi fell short of meeting its burden of showing that the accused Legacy products have no substantial non-infringing uses.

¹⁴⁹ *See also* Section III(C)(2)(b) (general principles of law) and Section IV(A)(5)(b) (citing *In re Bill of Lading Transmission*, 681 F.3d at 1338; *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d at 1327; *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d at 851), *supra*.

6. Domestic Industry-Technical Prong

Rovi identifies the following DI products:

- 1) Rovi i-Guide,
- 2) Rovi Passport,
- 3) Verizon FiOS system, and
- 4) SuddenLink.

Rovi Br., Section VI(J).

a) Claims 1 and 10

(1) Claim 1: “First and second tuners”

(a) Rovi i-Guide

Rovi argues:

Rovi i-Guide products have two tuners, under both parties’ constructions. CX-0003C (Balakrishnan WS) at Q/A 574-75, 578; CX-1225 (User Guide: DCX3501-M) at 10; CX-1593 (i-Guide and TotalGuide Screenshots for the ’512 Patent) at 4.

Rovi Br. at 175.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(1).¹⁵⁰

¹⁵⁰ In reply, Comcast argues:

Rovi’s technical DI allegations for the ’512 patent are rife with deficiencies. Resp. PoHB at 221-226. For the each of the DI products, Rovi’s allegations fail to satisfy at least the “Neither a/the First Tuner nor the Second Tuner Are Available,” and “Cancel[s] a Function of the Second Tuner . . .” limitations. Resp. PoHB at 221-226. And, Rovi’s allegation as to Verizon FiOS are incomplete, and rely on conclusory allegations. For example, Rovi asserts that the “interactive television program guide is

The administrative law judge has determined that the evidence shows that the Rovi i-Guide products practice this limitation. *See* CX-0003C at Q/A 574-75, 578; CX-1225 (User Guide: DCX3501-M) at 10; CX-1593 (i-Guide and TotalGuide Screenshots for the '512 Patent) at 4.

(b) Rovi Passport

Rovi argues:

According to the DCX3400-M User Guide, the Rovi Passport products have two tuners under both side's constructions. CX-0003C (Balakrishnan WS) at Q/A 593-95, 597; CX-1216 (Motorola - DCX3400 User Guide) at 8; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 3.

Rovi Br. at 177.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(2).

The administrative law judge has determined that the evidence shows that the Rovi Passport products practice this limitation. *See* CX-0003C at Q/A 593-95, 597; CX-1216 (Motorola - DCX3400 User Guide) at 8; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 3.

implemented on the set top box." Compl. PoHB at 180 (citing CX-0003C, QA 662). But Dr. Balakrishnan did not review any source code, and cites no support to substantiate this opinion. *Id.*

Resps. Reply at 70 (Section VII(G)). This argument does not dislodge Rovi's evidence for any of the domestic industry products, nor does it provide a rationale or evidentiary support for ruling for Comcast.

(c) Verizon, FiOS

Rovi argues:

There are six tuners in the Verizon FiOS products under both sides' constructions. CX-0003C (Balakrishnan WS) at Q/A 650-51. The Verizon FiOS products can tune to, at most, six programs at the same time, which indicates that there are six tuners in the Verizon FiOS products. CX-0003C (Balakrishnan WS) at Q/A 652; CX-1623 (Verizon Screenshots for the '512 Patent) at 5.

Rovi Br. at 179.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(3) (Comcast later argues about the second tuner in regard to the "cancel a function of the second tuner" limitation, *see* Resps. Br. at 224-25).

The administrative law judge has determined that the evidence shows that the Verizon products practice this limitation. *See* CX-0003C at Q/A 650-52; CX-1623 (Verizon Screenshots for the '512 Patent) at 5.

(d) SuddenLink

Rovi argues:

There are two tuners in the SuddenLink products under both side's constructions. CX-0003C (Balakrishnan WS) at Q/A 668; CX-1217 (Motorola - DCX3400 User Manual).

Rovi Br. at 180.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(4).

The administrative law judge has determined that the evidence shows that the SuddenLink products practice this limitation. *See* CX-0003C at Q/A 667-70.

(2) Claim 1: “Interactive television program guide”

(a) Rovi i-Guide

Rovi argues:

Rovi i-Guide products have an interactive television program guide under both parties’ constructions. CX-0003C (Balakrishnan WS) at Q/A 579-80; CX-1593 (i-Guide and TotalGuide xD Screenshots for the ’512 Patent) at 3.

Rovi Br. at 175.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(1).

The administrative law judge has determined that the evidence shows that the Rovi i-Guide products practice this limitation. *See* CX-0003C at Q/A 579-80; CX-1593 (i-Guide and Total Guide xD Screenshots for the ’512 Patent) at 3.

(b) Rovi Passport

Rovi argues:

The Rovi Passport products have an interactive television program guide under both sides’ constructions. CX-1609 (Passport and TotalGuide xD Screenshots for the ’512 Patent) at 1; CX-0003C (Balakrishnan WS) at Q/A 598.

Rovi Br. at 177.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(2).

The administrative law judge has determined that the evidence shows that the Rovi Passport products practice this limitation. *See* CX-0003C at Q/A 598; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 1.

(c) Verizon FiOS

Rovi argues:

The Verizon FiOS products have an interactive television program guide under both sides' constructions. CX-0003C (Balakrishnan WS) at Q/A 653; CX-1623 (Verizon Screenshots for the '512 Patent) at 1.

Rovi Br. at 179.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(3) (Comcast later argues about the second tuner in regard to the "cancel a function of the second tuner" limitation, *see* Resps. Br. at 224-25).

The administrative law judge has determined that the evidence shows that the Verizon products practice this limitation. *See* CX-0003C at Q/A 650-52; CX-1623 (Verizon Screenshots for the '512 Patent) at 5.

(d) SuddenLink

Rovi argues:

The SuddenLink products also have an interactive television program guide

under both side's constructions. CX-0003C (Balakrishnan WS) at Q/A 671-72.

Rovi Br. at 181.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(4).

The administrative law judge has determined that the evidence shows that the SuddenLink products practice this limitation. *See* CX-0003C at Q/A 671-72.

(3) Claim 1: "Receiving a request"

(a) Rovi i-Guide

Rovi argues:

Rovi i-Guide products, when used, "receive a request to perform a tuning operation" under both side's constructions for "tuning operation." CX-0003C (Balakrishnan WS) at Q/A 581.

Rovi Br. at 175.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(1).

The administrative law judge has determined that the evidence shows that the Rovi i-Guide products practice this limitation. *See* CX-0003C at Q/A 581.

(b) Rovi Passport

Rovi argues:

The Rovi Passport products, when used, "receive a request to perform a tuning operation" under both sides' constructions for "tuning operation." CX-0003C (Balakrishnan WS) at Q/A 600.

Rovi Br. at 177.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(2).

The administrative law judge has determined that the evidence shows that the Rovi Passport products practice this limitation. *See* CX-0003C at Q/A 600.

(c) Verizon FiOS

Rovi argues:

The Verizon FiOS products, when used, “receive a request to perform a tuning operation” under both side’s constructions for “timing operation.” CX-0003C (Balakrishnan WS) at Q/A 655.

Rovi Br. at 179.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(3).

The administrative law judge has determined that the evidence shows that the Verizon products practice this limitation. *See* CX-0003C at Q/A 655.

(d) SuddenLink

Rovi argues:

The SuddenLink products, when used, “receive a request to perform a tuning operation” under both side’s constructions for “tuning operation.” CX-0003C (Balakrishnan WS) at Q/A 673.

Rovi Br. at 181.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(4).

The administrative law judge has determined that the evidence shows that the SuddenLink products practice this limitation. *See* CX-0003C at Q/A 673.

(4) Claim 1: “Determining neither tuner is available”

(a) Rovi i-Guide

Rovi argues:

If both tuners are recording shows and the user attempts to change the channel to a new show, the determination is made that neither tuner is available and an alert is displayed stating that “Two recordings are in progress.” *Id.* at Q/A 582; CX-1593 (i-Guide and TotalGuide xD Screenshots for the ’512 Patent) at 2, 4.

Rovi Br. at 175.

Comcast argues that the Rovi i-Guide products do not practice this limitation because “Dr. Balakrishnan has not demonstrated that the Rovi i-Guide determines that a conflict exists in every scenario where both tuners are allocated.” RX-0847C (Bederson RWS) at Q/A 168; Resps. Br. at 222.

The evidence shows that the Rovi i-Guide products practice this limitation because the system displays an alert showing that “TWO RECORDINGS ARE IN PROGRESS.” *See* CX-0003C at Q/A 582; CX-1593 (i-Guide and TotalGuide xD Screenshots for the ’512 Patent) at 2, 4.

(b) Rovi Passport

Rovi argues:

If the tuned-to signals of the two tuners in the Passport are being used to record programs and a user were to tune to different program that is not being recorded to either view or record the tuned-to signal, then the Passport would meet this limitation. CX-0003C (Balakrishnan WS) at Q/A 601; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 1, 3.

Rovi Br. at 177.

Comcast argues that the Rovi Passport products do not practice this limitation for the same reasons it argued for the i-Guide. *See* Resps. Br. at 223 (“Like i-Guide, this alert is in response to a rule, and not in response to the tuners being unavailable.”).

Like the i-Guide products, the evidence shows that the Rovi Passport products practice this limitation because the system displays an alert showing that “Both tuners are currently busy.” *See* CX-0003C at Q/A 601; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 1, 3.

(c) Verizon FiOS

Rovi argues:

The Verizon FiOS products meet this limitation whenever the tuned-to signals of the six tuners in a Verizon FiOS are being used to record programs and a user tunes to a different program that is not being recorded to either view or record the tuned-to signal. CX-0003C (Balakrishnan WS) at Q/A 656; CX-1623 (Verizon Screenshots for the '512 Patent)

at 4. Upon attempting to change the channel, an alert is displayed stating that there is a “DVR Conflict.” CX-1623 (Verizon Screenshots for the ’512 Patent) at 5.

Rovi Br. at 179.

Comcast argues that the Verizon products do not practice this limitation for the same reasons as the i-Guide, because “an alert is not provided ‘in response’ to the tuner unavailability, but when all six tuners are used to record. . . . Like i-Guide this alert is in response to a rule, and not in response to the tuners being unavailable.” Resps. Br. at 223.

Like the i-Guide and Passport products, the evidence shows that the Verizon products practice this limitation because the system displays an alert showing a “DVR Conflict.” See CX-0003C at Q/A 656; CX-1623 (Verizon Screenshots for the ’512 Patent) at 4.

(d) SuddenLink

Rovi argues:

The SuddenLink products meet this limitation whenever the tuned-to signals of the two tuners in a SuddenLink are being used to record programs and a user tunes to a different program that is not being recorded to either view or record the tuned-to signal. CX-0003C (Balakrishnan WS) at Q/A 674. Upon attempting to change the channel to a new show, an alert is displayed stating that “Two Recordings Are in Progress.”

CX-0003C (Balakrishnan WS) at Q/A 674.

Rovi Br. at 181.

Comcast argues that the SuddenLink products do not practice this limitation because “the alert is provided when both tuners are set to record. . . . This is a response to a rule [(two tuners recording),] not the first tuner and second tuner being unavailable.” Resps. Br. at 226.

As in the case of the i-Guide, Passport, and Verizon products, the evidence shows that the SuddenLink products practice this limitation because the system displays an alert showing that “TWO RECORDINGS ARE IN PROGRESS.” See CX-0003C at Q/A 674.

(5) Claim 1: “Displaying an alert” and “opportunity to cancel”

(a) Rovi i-Guide

Rovi argues:

In response to the determination, the interactive television program guide on the Rovi i-Guide set-top box outputs an alert that provides a user with an opportunity to direct the interactive television program guide to stop a function of the second tuner (and even the “last allocated” tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 583; CX-1593 (i-Guide and TotalGuide xD Screenshots for the ’512 Patent) at 4. This alert “provides the user with an

opportunity to direct the interactive television program guide” to “Swap to view your other recording,” to “Continue recording, don’t change channel,” or to “Stop recording, change channel” (*i.e.*, cancel a function of the second (or last-allocated) tuner) CX-0003C (Balakrishnan WS) at Q/A 583. By choosing the “swap” option, the user can select the first or last allocated tuner to cancel (choosing to swap to the last allocated tuner for canceling would meet this limitation under [Comcast’s] construction). *Id.*

Rovi Br. at 175-76.

Comcast argues that the i-Guide products do not satisfy this limitation because the i-Guide “only cancels the function of the foreground tuner, which is an altogether different algorithm than claimed in the ’512 claims.” Resps. Br. at 222.

The evidence shows that the Rovi i-Guide products practice this limitation because the system displays an alert that allows the user to cancel either recording. *See* CX-0003C at Q/A 583; CX-1593 (i-Guide and TotalGuide xD Screenshots for the ’512 Patent) at 4.

(b) Rovi Passport

Rovi argues:

In response to the determination, the interactive television program guide on the Rovi Passport set-top box outputs an alert that provides a user with an opportunity to direct the interactive television program guide to stop a

function of the second timer (and even the “last allocated” tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 602; CX-1609 (Passport and TotalGuide xD Screenshots for the ’512 Patent) at 3. This alert “provides the user with an opportunity to direct the interactive television program guide” to stop one of the two recordings or to continue recording and dismiss the alert by selecting “Don’t change channels.” CX-0003C (Balakrishnan WS) at Q/A 602.

Rovi Br. at 177-78.

Comcast argues that the Passport products do not practice this limitation because “Rovi has not demonstrated that Passport implements the algorithm claimed by the ’512 patent.” Resps. Br. at 223.

The evidence shows that the Rovi i-Guide products practice this limitation because the system displays an alert that allows the user to cancel either recording. *See* CX-0003C at Q/A 602; CX-1609 (Passport and TotalGuide xD Screenshots for the ’512 Patent) at 3.

(c) Verizon FiOS

Rovi argues:

In response to the determination, the interactive television program guide on the Verizon FiOS set-top box outputs an alert that provides a user with an opportunity to direct the interactive television program guide to stop a function of the second timer (and even

the “last allocated” tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 657; CX-1623 (Verizon Screenshots for the ’512 Patent) at 5. This alert “provides the user with an opportunity to direct the interactive television program guide” to stop one of the six recordings or to continue recording and dismiss the alert by selecting “Exit.” CX-0003C (Balakrishnan WS) at Q/A 657.

Rovi Br. at 179-80.

Comcast argues that the Verizon products do not practice this limitation because Rovi has not identified the second tuner in this limitation’s analysis. *See* Resps. Br. at 225-25.

This is Dr. Balakrishnan’s testimony:

Q657. Moving on to the next limitation of claim 1 is the step of “in response to the determination, displaying an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.” Do you have an opinion as to whether, when used, the Verizon FiOS products meet this limitation?

A657. Yes, the Verizon FiOS products meet this limitation under both side’s

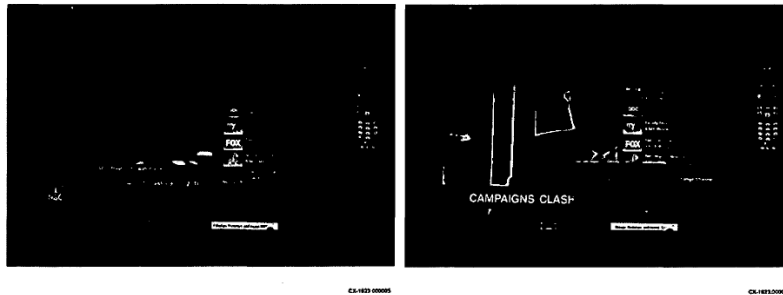
claim constructions. I also discussed this step previously with respect to the X1 Guide infringement and I adopt that discussion here. Consistent with my testimony regarding X1 Guide infringement, in response to the determination, the interactive television program guide on the Verizon FiOS set top box outputs an alert that is capable of being shown on a display screen of a television and which is presented visually on a display screen that provides a user with an opportunity to direct the interactive television program guide to stop a function of the second tuner (and even the “last allocated” tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation.

“In response to the determination” of the previous limitation, the Verizon FiOS displays an alert, as shown in exhibit CX-1623.005

This alert “provides the user with an opportunity to direct the interactive television program guide” to stop one of the six recordings or to continue recording and dismiss the alert by selecting “Exit,” have the expected outcomes when received by the Verizon FiOS.

CX-0003C at Q/A 657. These are the screen shots from CX-1623 at 5-6:

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The administrative law judge has determined that Rovi has not shown the Verizon products practice this limitation. As Comcast points out, neither Rovi nor Dr. Balakrishnan have sufficiently identified a second tuner.

(d) SuddenLink

Rovi argues:

In response to the determination, the interactive television program guide on the SuddenLink set-top box outputs an alert that provides a user with an opportunity to direct the interactive television program guide to stop a function of the second tuner (by swapping, which includes the "last allocated" tuner) to permit the second (or last allocated) tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 675. This alert "provides the user with an opportunity to direct the interactive television program guide" to stop one of the six recordings or to continue recording and dismiss the alert by

selecting “Continue recording.” CX-0003C (Balakrishnan WS) at Q/A 675.

Rovi Br. at 181.

Comcast argues that Rovi has not shown that the SuddenLink products practice this limitation because the testimony is directed to the Verizon products and because the SuddenLink products use “an altogether different algorithm than is used in the ’512 patent . . . [that] cannot satisfy Respondents’ construction for this term.” Resps. Br. at 226.

Rovi’s reply does not clarify Dr. Balakrishnan’s testimony. *See* Rovi Reply at 64-65.

The evidence shows that the SuddenLink products practice this limitation because the system displays an alert that allows the user to cancel either recording. *See* CX-0003C at Q/A 674-75. Although Q/A 675 contains obvious errors (the multiple references to the Verizon products), the screen shots in Q/A 675 are for the SuddenLink guide, and the SuddenLink guide is described in the immediately surrounding testimony (*e.g.*, Q/A 673-74, 76-77). It is more likely than not that the SuddenLink guides practice this limitation.

(6) Claim 10

(a) Rovi i-Guide

Rovi argues:

In Rovi i-Guide products, the interactive television program guide is implemented on the set-top box, which is user equipment, so there is no dispute that the “system” and “implemented on the system” requirements are met even

under Respondents' constructions. CX-0003C (Balakrishnan WS) at Q/A 588.

Rovi Br. at 176.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(1).

The administrative law judge has determined that the evidence shows that the Rovi i-Guide products practice this limitation. *See* CX-0003C at Q/A 588.

(b) Rovi Passport

Rovi argues:

The displayed screen in the Passport provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 604; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 3.

Rovi Br. at 178.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(2).

The administrative law judge has determined that the evidence shows that the Rovi Passport products practice this limitation. *See* CX-0003C at Q/A 604; CX-1609 (Passport and TotalGuide xD Screenshots for the '512 Patent) at 3.

(c) Verizon FiOS

Rovi argues:

The displayed screen provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 659.

Rovi Br. at 180.

Comcast does not rebut this argument specifically. *See generally* Resps. Br., Section IX(G)(3) (however, Comcast's "second tuner" argument, *see* Resps. Br. at 224-25, applies here too).

This is Dr. Balakrishnan's testimony:

Q659. You earlier discussed claim 10 of the '512 patent with respect to infringement by X1 Guides. Do you have an opinion as to whether the Verizon FiOS products meet the limitations of claim 10 of the '512 patent?

A659. Yes. The Verizon FiOS products meet all of the limitations of claim 10 of the '512 patent. As I showed in the screen shots that I discussed with respect to the last limitation of claim 1 regarding canceling a function, the displayed screen provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation.

Dr. Balakrishnan has not sufficiently explained how the guide allows a user to cancel the function of the second tuner. Accordingly, the administrative law judge has determined that Rovi has not shown the Verizon products practice claim 10.

(d) SuddenLink

Rovi argues:

The displayed screen provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation. CX-0003C (Balakrishnan WS) at Q/A 677.

Rovi Br. at 181.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(4).

The administrative law judge has determined that the evidence shows that the SuddenLink products practice claim 10. *See* CX-0003C at Q/A 677.

b) Claim 13

Claim 13 requires the guide to be “implemented on a system.” *See* JX-0006 at 19:41-59.

(a) Rovi i-Guide

Rovi argues:

In Rovi i-Guide products, the interactive television program guide is implemented on the set-top box, which is user equipment, so there is no dispute that the “system” and “implemented on the system” requirements are met even

under Respondents' constructions. CX-0003C (Balakrishnan WS) at Q/A 588.

Rovi Br. at 176.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(1).

The administrative law judge has determined that the evidence shows that the Rovi i-Guide products practice this limitation. *See* CX-0003C at Q/A 588.

(b) Rovi Passport

Rovi argues:

In the Rovi Passport products, the interactive television program guide is implemented on the set-top box, which is user equipment, so there is no dispute that the "system" and "implemented on the system" requirements are met even under Respondents' constructions. CX-0003C (Balakrishnan WS) at Q/A 607.

Rovi Br. at 177.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(2).

The administrative law judge has determined that the evidence shows that the Rovi Passport products practice this limitation. *See* CX-0003C at Q/A 607.

(c) Verizon FiOS

Rovi argues:

In the Verizon FiOS products, the interactive television program guide is implemented on the set-top box, which is user equipment, so there is no dispute

that the “system” and “implemented on the system” requirements are met even under Respondents’ constructions. [CX-0003C] at Q/A 662.

Rovi Br. at 180.

Comcast argues that Rovi has not shown that the guides are “implemented on the system.” Resps. Br. at 225.

Rovi replies: “This is not true—Rovi has presented this evidence. *See* Compls. Br. at 178-80.” Rovi Reply at 65.

This is Dr. Balakrishnan’s testimony:

Q662. Do you have an opinion regarding the “system” limitation for the Verizon FiOS products?

A662. []

CX-0003C at Q/A 662.

Dr. Balakrishnan has not sufficiently explained how the guide is implemented on the system/set-top box. Accordingly, the administrative law judge has determined that Rovi has not shown the Verizon products practice this limitation.

(d) SuddenLink

Rovi argues:

In the SuddenLink products, the interactive television program guide is implemented on the set-top box, which is user equipment, so there is no dispute that the “system” and “implemented on the system” requirements are met even

under [Comcast's] constructions. CX-0003C (Balakrishnan WS) at Q/A 680.

Rovi Br. at 181-82.

Comcast does not rebut this argument. *See generally* Resps. Br., Section IX(G)(4).

The administrative law judge has determined that the evidence shows that the SuddenLink products practice this limitation. *See* CX-0003C at Q/A 680-81.

c) Claim 22

Rovi jointly addresses claims 10 and 22 for the alleged domestic industry products. *See* Rovi Br., Section VI(J)(1). Comcast does not directly rebut Rovi's arguments about claim 22. *See generally* Resps. Br., Section IX(G); Resps. Reply, Section VII(G). Thus, the administrative law judge finds claim 22 is practiced by the i-Guide, Passport, and SuddenLink products for the same reasons claim 10 is practiced. The administrative law judge finds that Rovi has not shown the Verizon products practice claim 22 for the same reasons provided for claim 10.

7. Validity

a) Obviousness

Comcast's expert analyzes the claims with alphanumeric references, as follows:

- [1a] 1. A method for resolving a conflict when multiple operations are performed using multiple tuners controlled by an interactive television program guide, the method comprising:

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- [1b] receiving a request to perform a tuning operation;
- [1c] determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and
- [1d] in response to the determination, displaying an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

See RX-0004C (Bederson WS) at Q/A 116; JX-0006 at 18:35-47.

Claim 13 follows:

- [13a] 13. A system for resolving a conflict when multiple operations are performed using multiple tuners controlled by an interactive television program guide, the system comprising:
 - [13b] a first tuner;
 - [13c] a second tuner; and
 - [13d] an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to:

- [13e] receive a request to perform a tuning operation;
- [13f] determine that neither the first tuner nor the second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and
- [13g] in response to the determination, display an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

See RX-0004C (Bederson WS) at Q/A 116; JX-0006 at 19:41-59. Given the similarities between the claims (neither Rovi nor Comcast has pointed to material evidence that is specific to the system claim or the method claim), and because an analysis of claim 13 will cover all of the limitations of claim 1, the administrative law judge has discussed claim 13 only.

(1) Sano (RX-0152) in combination with the general knowledge of a POSITA, and/or LaJoie (RX-0063), Prevue Guide (RX-0073), Alexander (RX-0155), Nagano (RX-0153), or Marsh (RX-0064)

(a) Limitations 13a-d

Comcast argues, for limitations 13a-d, that

Sano teaches the use of a STB consisting of multiple tuners (“M tuners”), which is controlled by an IPG. RX-0004C

(Bederson WS) at Q/A 123, 70-76. In particular, figures 4 and 5 of Sano shows the multiple tuners, which can be a “first tuner” and “second tuner.” *Id.* at 74-75. And, the STB is controlled by an electronic program guide. *Id.* at 73. This electronic program is located on the STB, as was conventional at the time of Sano, and therefore was located on user equipment as required under Respondents’ construction of “an IPG on the system . . .”

Resps. Br. at 210.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(i).

The administrative law judge has determined that the evidence shows that Sano teaches these limitations. *See* RX-0004C (Bederson WS) at Q/A 70-76, 119-124.

(b) Limitation 13e

Comcast’s entire argument is “Sano teaches receiving a request for a tuning operation, such as watching a program or setting a recording. RX-0004C at Q/A 73.” Resps. Br. at 210. Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(i).

The administrative law judge has determined that the evidence shows that Sano teaches this limitation. *See* RX-0004C (Bederson WS) at Q/A 73 (citing RX-0152 at 11:42-51).

(c) Limitation 13f: “determining neither tuner is available”

Comcast argues:

Sano teaches “determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation.” In particular, Sano teaches that in the event the user attempts to set more recordings than there are tuners, a conflict results. As discussed below (next limitation), Sano further teaches providing an alert in the case of the conflict.

In addition, Sano teaches that all of the M tuners in the STB are capable of tuning to television program in the broadcast stream for recording. RX-0004C (Bederson WS) at Q/A 74-75. This satisfies the limitation requiring “wherein the first tuner and the second tuner are both capable of performing the tuning operation.”

Resps. Br. at 210.

Rovi argues that “Sano only discloses timer conflicts and therefore does not” teach “determining that neither” tuner is available. Rovi Br. at 188.

RX-0004C (Bederson WS) at Q/A 76 points to Sano at 12:53-63, which discusses determining that multiple tuners are unavailable. Sano teaches:

In the case of the digital broadcast recording and reproducing apparatus of FIG. 5, the number of channels that can be arbitrarily selected and simultaneously recorded is three.
Therefore, if the number of channels

more than three is set in the same time period in the timer recording setting, it is impossible to record all the set channels. Such a misoperation can be prevented by preparing so as to provide an alarm such as a beep tone or a warning display when the number of set channels exceed the maximum number of channels that can be simultaneously recorded in the timer recording setting. This alarm can be used also as a warning provided when the sum total of the times of all the set programs exceed the remaining time of the magnetic tape.

RX-0004C (Bederson WS) at Q/A 76 (emphasis provided by Dr. Bederson). The administrative law judge has determined that this evidence shows that Sano teaches this limitation. *See id.*

(d) Limitation 13g: “displaying an alert” and “opportunity to cancel”

Comcast argues:

Sano teaches that “in response to the determination, displaying an alert.” RX-0004C (Bederson WS) at Q/A 76. In particular, in the event that a user attempts to record more programs than tuner, an alert such as a warning display is provided. *Id.* Sano does not explicitly teach an alert that “provides a user with an opportunity to direct the interactive television program guide to cancel a

function of the second tuner to permit the second tuner to perform the requested tuning operation.” But this limitation is satisfied by each of the LaJoie, Alexander, Prevue Guide, and Nagano references, each of which teaches such as an alert. *Id.* at Q/A 44, 135, 303-304, 309.

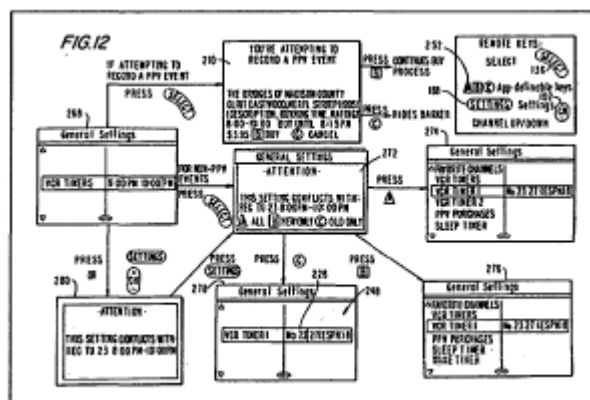
In particular, the LaJoie reference teaches an alert screen that allows the user to cancel the function of a tuner, such as canceling a recording. *Id.* at Q/A 33, 43 (*e.g.*, annotated Fig. 12); RX-0063 at Fig. 12. Similarly, Alexander teaches, in the case of a tuner conflict, an alert that allows the user to cancel a recording, or adjust the length of recording, to resolve the conflict. RX-0004C at Q/A 98; RX-0155 at 12:53-13:25. The Prevue Guide also teaches an alert upon detection of a conflict between two recordings; the alert asks the user “[w]ould you like to replace the prior recording with this new recording,” allowing the user to cancel one of the tuner operations to accommodate the new request. RX-0004C at Q/A 86; RX-0073C.0190. Nagano also detects a conflict between recordings (RX-0004C at Q/A 109), and provides an alert with a cursor that allows the user to adjust the recordings to resolve the conflict, and a “clear” key to cancel one of the recordings to resolve the conflict (*Id.* at Q/A 110-111); *see also* RX-0153 at 16a-c; 10:6-18.

Resps. Br. at 210-11.

Rovi argues that LaJoie, the Prevue Guide, Alexander, and Nagano teach “timer conflicts” rather than “tuner conflicts.” *See* Rovi Br. at 189-92.

The administrative law judge has determined that LaJoie, the Prevue Guide, Alexander, and Nagano each teach displaying an alert that provides the user with an opportunity to cancel a tuner function.

LaJoie teaches an alert (272, in Fig. 12) that allows the user to decide between new and old selections. *See* RX-0004C (Bederson WS) at Q/A 43; RX-0063 at Fig. 12. Dr. Bederson provided the following annotated figure:



Id.

Alexander also teaches an alert that allows the user to decide between two selections. *See* RX-0004C (Bederson WS) at Q/A 98; RX-0115 at 12:53-13:25. In particular, in a section entitled, “Record Instruction Conflict Resolution,” Alexander describes:

The EPG's Record Function recognizes conflicts in viewer record instructions. In one embodiment, the EPG's Record Function ***prompts the viewer*** to resolve the conflict. For instance, in the Record Function, the EPG would accept viewer instructions to record a particular program. The EPG compares the newly received record instruction ***to as-yet incompletely executed, or as yet unexecuted, record instructions*** in the Record List. If ***the EPG detects an overlap*** in date, time and duration between the newly received instruction on the one hand and one or more of the remaining record instructions in the Record List, the EPG formats a message to the viewer describing the conflict. The message describes to the user the newly received instruction to record a particular program and the conflicting record instructions in the Record List. In Record Function, the EPG will prevent entry of conflicting instructions into the Record List. ***The EPG will require that the viewer revise the record instructions to eliminate the conflict.***

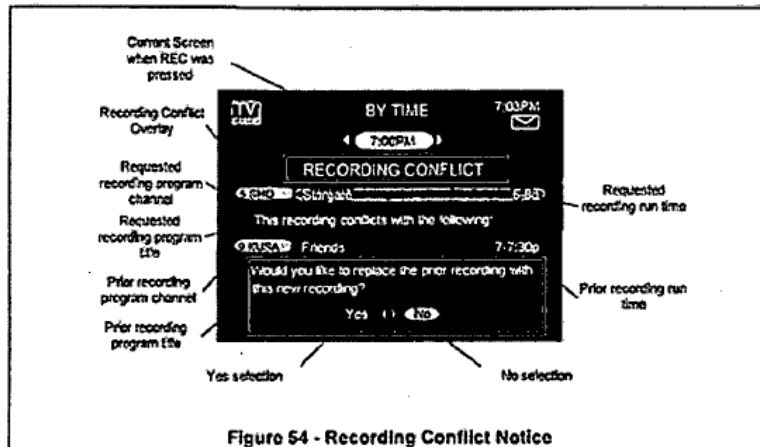
See id. (emphasis added).

The Prevue Guide also teaches an alert upon detection of a conflict between two recordings; the alert asks the user “[w]ould you like to replace the prior recording with this new recording,” allowing the user to cancel one of the tuner operations to accommodate

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the new request. *See* RX-0004C (Bederson WS) at Q/A 86; RX-0073C.0190. This is an annotated figure from Dr. Bederson:

3.10.6 Recording Conflict Notice



Id.

Nagano also detects a conflict between recordings, and displays an alert about that conflict, as shown by the flowchart in Fig. 13A. *See* RX-0004C (Bederson WS) at Q/A 109. Nagano, Figs. 15B 16A-C, and 17E, shows that the conflicted request can be cancelled. *Id.* at Q/A 110-11; RX-0153 at 10:6-18 (the “Clear Key” allows the user “to erase the picture recording reservation of the channel B.”).

The Marsh reference, RX-0064, is not discussed in the text of Comcast’s brief. *See generally* Resps. Br., Section IX(F)(2)(f) (the heading lists Marsh, but the reference is not discussed).

Comcast’s brief, however, does not contain any explanation of why a person of ordinary skill in the art would combine these references with Sano. *See generally* Resps. Br., Section IX(F)(2)(f). Its Reply—for all of its obviousness combinations—provides three sentences:

Rovi never addresses the most basic point. No matter how many tuners you have (*i.e.*, n tuners), a conflict will arise when you have one more request than the number of tuners (*i.e.*, $n+1$ requests). RX-0004C (Bederson WS) at Q/A 303. This basic principal would lead any POSITA to combine Sano or Chun with each of the other conflict detection references (LaJoie, Prevue, Alexander, Nagano, Marsh). *Id.*

Resps. Reply at 76. This is the cited testimony:

Q303. Are there examples of these standard engineering techniques in the prior art?

A303. Yes. For example, the determination of a conflict and provision of an alert message (*i.e.*, display), was a well-known technique. This was a well-known technique not only with respect to electronic program guides, as disclosed in the LaJoie, Nagano, Alexander, and Prevue Guide references, but also with respect to electronics and systems with displays, such as the Windows 95 operating system. Combining these techniques with the teaching of multiple tuners would yield predictable results. As discussed above, “determining a conflict” and “providing an alert” do not ‘change in any material way as the number of tuners increases. Each tuner still has a conflict between two existing requests, and the provision of an alert

requires the display of a picture to the screen in either the single or multiple tuner scenario. And although the claims as recited only require an alert, even the additional unrecited step of an actual resolution of the conflict (*i.e.*, allocation of the timers), the solution is well understood, and will provide predictable results, because it is a basic math problem known to persons of ordinary skill in the art.

RX-0004C (Bederson WS) at Q/A 303. This testimony does not explain why a person of ordinary skill in the art would modify the primary reference, Sano, in the first place. *See Plantronics*, 724 F.3d at 1354 (“Where, as here, the necessary reasoning is absent, we cannot simply assume that ‘an ordinary artisan would be awakened to modify prior art in such a way as to lead to an obviousness rejection.’”).¹⁵¹

Accordingly, the administrative law judge has determined that Comcast has not met its burden of showing that claim 13, as a whole, would have been obvious in view of the above references, because it has not provided a sufficient rationale for combining the references.

(e) Claims 10 and 22

Comcast argues:

Sano teaches “wherein the displaying the alert comprises displaying a display screen using the interactive television program guide.” RX-0004C (Bederson

¹⁵¹ See n.92, *supra*.

WS) at Q/A 76. In particular, in the event that a user attempts to record more programs than tuners, an alert such as a warning display is provided. *Id.* Sano does not explicitly teach an alert that “provides the user with a first option to continue to perform the function of the second tuner, and with a second option to cancel the function of the second tuner to perform the requested tuning operation.” But this limitation is satisfied by each of the LaJoie, Alexander, Prevue Guide, and Nagano references, each of which teaches such as an alert. *Id.* at Q/A 44, 135, 303-304, 309; *supra* § IX.F.2.f.iv (describing teachings of the combination references with respect to Element D of Claim 1 and Element G of Claim 13).

Resps. Br. at 211-12.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(i).

The administrative law judge has determined that the evidence shows that Sano teaches the subject matter of claims 10 and 22. *See* RX-0004C (Bederson WS) at Q/A 76, 135, 303-04, 309.

(2) *Prevue Guide (RX-0073) in combination with the general knowledge of a POSITA, and/or Sano (RX-0152) or Chun (RX-0158)*

For the Prevue Guide, Comcast argues:

The Prevue Guide was known before, and offered for sale more than one year before the priority date of the '512

patent, and qualifies as prior art under §§ 102(a) or 102(b). RX-0073C; RX-0004C at Q/A 87. In addition, the Prevue Guide was developed before the earliest priority date of the '512 patent and is prior art under § 102(g)(2). *Id.*

Resps. Br. at 209.

Rovi argues:

Respondents have not demonstrated by clear and convincing evidence that the Prevue Guide is prior art to the '512 Patent. Respondents rely on two pieces of evidence to attempt to demonstrate that the Prevue Guide is prior art to the '512 Patent:

(1) Mr. Lemmons's deposition testimony from April 7, 1995 (RX-0646C (Lemmons Dep. Trans.) at 90:7-14); and (2) the alleged Prevue Guide product documentation, RX-0073C (TV Guide Prevue Networks Requirements Specification), which has a 1996 copyright date. RX-0004C (Bederson WS) at Q/A 88-89. Neither provides clear and convincing evidence that the Prevue Guide is prior art to the '512 patent. Mr. Lemmons's 1995 testimony does not establish what features the Prevue Guide had in 1995 and the 1996 documentation was explicitly a "confidential" document that Respondents have not proven was publicly known or available or published. Furthermore, it merely contains a set of

requirements that Respondents have not demonstrated was used in any public implementation. CX-1902C (Balakrishnan RWS) at Q/A 108.

Rovi Br. at 190.

Comcast replies:

Rovi inexplicably argues that the 1995 testimony of Mr. Lemmons regarding the Prevue Guide *in 1995*, fails to establish the features of the Prevue Guide. Such contemporaneous testimony is highly probative. *CEATS, Inc. v. Continental Airlines, Inc.*, 526 Fed. App'x 966, 971 (“[d]ocumentary or physical evidence that is made contemporaneously with the inventive process provides the most reliable proof that the inventor’s testimony has been corroborated”) (citation omitted). Mr. Lemmons testimony from 1995, when the salient features of Prevue were implemented in the Full Service Network in Orlando establishes the Prevue Guide as prior art. RX-0004C (Bederson WS) at Q/A 82. The 1996 documentation, which was authored in part by the lead named inventor of the ’512 patent, details functionality fully consistent with Mr. Lemmons’ testimony and is fully corroborative. *Id.* at Q/A 80-86.

Resps. Reply at 75.

Rovi replies that “Respondents’ citation to Dr. Bederson’s conclusion is irrelevant; Dr. Bederson’s

unsupported conclusion regarding the legal issue of whether a reference or use constitutes prior art is not based on his expert opinion and is not based on any personal knowledge.” Rovi Reply at 70.

The administrative law judge has determined that Comcast has not shown, through clear and convincing evidence, that the Prevue Guide (as represented in RX-0073) is prior art.

This is the portion of Dr. Bederson’s testimony that Comcast cites:

Q87. Is the Prevue Guide prior art to the ’512 patent?

A87. Yes. I understand that the Prevue Guide qualifies as prior art to the ’512 patent at least under 35 U.S.C. § 102(g)(2). The Prevue Guide, along with its salient features, as documented, was also offered for sale, and should be prior art under 35 U.S.C. § 102(a) or (b). This all occurred in the 1995 to 1996 timeframe, before June 16, 1998, which is the earliest effective filing date Rovi has claimed for any asserted claim of the ’512 patent.

RX-0004C (Bederson WS) at Q/A 87. This testimony is conclusory, is not based on personal knowledge, and does not implicate the specialized knowledge that qualified Dr. Bederson as an expert. *See, e.g.*, RX-0004C (Bederson WS) at Q/A 10-15 (discussing expert qualifications). Further, Comcast does not explain how Mr. Lemmons’s 1995 testimony (from a different legal matter) supports its claim that a document from 1996 was publically available, particularly where the

document is labeled “Confidential” in the footer and indicates it was created in May 1996 (thus post-dating the 1995 testimony). *See* RX-0073C at 11 (the earliest date associated with the document is May 27, 1996). Further, Comcast has not cited evidence such as sales receipts or purchase orders of the Prevue Guide.

Accordingly, Comcast has not shown that the Prevue Guide is prior art. However, in the event that it is determined the Prevue Guide is prior art, the administrative law judge has analyzed Comcast’s argument below.

(a) Limitations 13a-d

Comcast argues that the Prevue Guide teaches limitations 13a, 13b, and 13d; it relies on Sano or Chun to teach multiple tuners, limitation 13c. Resps. Br. at 212.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(ii) (arguing that Prevue does not teach multiple tuners), Section VI(K)(3)(b)(i) (arguing that Sano does not teach tuner conflicts and the required alert); Rovi Reply, Section I(2)(c)(ii) (Rovi disputes the motivation to combine).

The administrative law judge has determined that the evidence shows that Prevue and Sano teach these limitations. *See* RX-0004C (Bederson WS) at Q/A 74-75 (Sano), 78-79, 81-82, 86, 168.

(b) Limitation 13e

Comcast argues:

The Prevue Guide teaches “receiving a request for a tuning operation,” such as watching a program or setting a

recording. RX-0004C (Bederson WS) at Q/A 81.

Resps. Br. at 213.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(ii).

The administrative law judge has determined that the evidence shows that Prevue Guide teaches this limitation. *See* RX-0004C (Bederson WS) at Q/A 81.

(c) Limitation 13f

Comcast argues:

The Prevue Guide recognized conflicts between the channels currently being used by the user, and previously set viewings or recordings, determining when a tuner conflict occurs. RX-0004C (Bederson WS) at Q/A 82. The conflict detection system of the Prevue Guide could have easily been modified by a POSITA to operate in a STB with “a first tuner” and “a second tuner,” or multiple tuners. *Id.* at Q/A 83-85; *supra* § IX.F.2.g.i (discussing modification to multi-tuner system with respect to Element A). Even if this were not the case, it would have been obvious to a POSITA to combine the teachings of Prevue Guide with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “first tuner” and a “second tuner.” RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine). In addition, Sano teaches that all of the

M tuners in the STB are capable of tuning to television program in the broadcast stream for recording. *Id.* at Q/A 74-75. This satisfies the limitation requiring “wherein the first tuner and the second tuner are both capable of performing the tuning operation.”

Resps. Br. at 213.

Rovi argues that Prevue does not teach a second tuner and that it discloses timer conflicts, not tuner conflicts. Rovi Br. at 189 (citing CX-1902C (Balakrishnan RWS) at Q/A 117); *see also* Rovi Reply at 71. This is Dr. Balakrishnan’s testimony:

Q117. What limitation or limitations of the asserted claims of the ’512 patent are missing in the Prevue Guide?

A117. The Prevue Guide is missing all of the limitations of the asserted claims of the ’512 patent.

The claims require multiple tuners, which the Prevue Guide lacks. Thus, the Prevue Guide cannot meet the requirement of “determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation,” cannot meet the requirement of displaying an alert “in response to the determination,” and cannot meet the requirement of “displaying an alert that provides the user with the opportunity to direct the interactive television program guide to

cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.”

Further, the Prevue Guide did not detect “tuning conflicts” based on requests for a tuning operation. Instead, the Prevue Guide detects conflicts based on prior timer settings.

By disclosing only a single tuner capable of performing a tuning operation, the Prevue Guide is similar to LaJoie, which also disclosed only a single tuner capable of performing a tuning operation and which did not detect tuning operation conflicts. The examiner found the claims of the ’512 patent to be patentable over LaJoie in view of Kim and Lee, which did disclose two tuners.

CX-1902C (Balakrishnan RWS) at Q/A 117.

Dr. Bederson testified that the Prevue Guide recognized tuner conflicts and that a person of ordinary skill knew of multiple tuners, would have been able to modify Prevue to accommodate multiple tuners, and that the modification would not have been complicated. *See* RX-0004C (Bederson WS) at Q/A 82-86, 135, 302, 307, and 309. Indeed, one of ordinary skill in the art would have needed to modify Prevue when porting it on a set-top box with multiple tuners.

The administrative law judge has determined that the evidence shows that a person of ordinary skill would have been able to modify Prevue for a two-tuner set-top box, such that Prevue and Sano teach and

satisfy this limitation. *See* RX-0004C (Bederson WS) at Q/A 82-86, 135, 302, 307, and 309.

(d) Limitation 13g

Comcast argues, in pertinent part, that “[t]he conflict resolution system of the Prevue Guide could have easily been modified by a POSITA to operate in a STB with ‘a second tuner,’ or multiple tuners.” Resps. Br. at 214. Comcast then cites its earlier arguments about Prevue and multi-tuner systems. *See id.* Comcast relies upon the same evidence it relied upon for limitation 13f.

Rovi has argued that Prevue do not teach cancelling “a function of the second tuner” as part of its omnibus argument for Comcast’s arguments involving Prevue as a primary reference. Rovi Br. at 190. Rovi has not cited any evidence beyond CX-1902C (Balakrishnan RWS) at Q/A 117, which is copied above.

The administrative law judge has determined that the evidence shows that a person of ordinary skill would have been able to modify Prevue for a two-tuner set-top box, and that the person of ordinary skill would have needed to make the modification when porting Prevue to a two-tuner set-top box, such that Prevue and Sano teach and satisfy this limitation. *See* RX-0004C (Bederson WS) at Q/A 82-86, 135, 302, 307, and 309. In particular, the administrative law judge finds that it would have taken only ordinary skill to modify Prevue’s alert to cancel a function of the second tuner. *Id.* at Q/A 85.

Accordingly, if Prevue is found to be prior art—which the administrative law judge previously determined it was not—then the administrative law judge has determined that claim 13 would have been

obvious over Prevue in light of Sano. Further, inasmuch as the parties did not present separate arguments for claim 1, the administrative law judge has also determined that claim 1 would have been obvious over Prevue in light of Sano.

(e) Claims 10 and 22

Comcast argues, in pertinent part, that:

When a conflict has been detected, the Prevue Guide teaches “displaying a display screen using the interactive program guide that provides the user with a first option to continue to perform the function of the [] tuner, and with a second option to cancel the function of the [] tuner to perform the requested tuning operation.” In order to resolve a potential conflict, the Prevue Guide displays to the user the option of either continuing to watch the present program or maintaining the previously set viewing/recording. *Id.* RX-0004C (Bederson WS) at Q/A 82. The commercial documentation of the Prevue Guide made clear that such conflict resolution was performed through a user screen and in response to user inputs. RX-0004C (Bederson WS) at Q/A 82; RX-0073C (Prevue Guide Documentation) at .0190 (screen stated “[w]ould you like to replace the prior recording with this new recording,” allowing the user to cancel one of the tuner operations to accommodate the new request).

The conflict resolution system of the Prevue Guide could have easily been modified by a POSITA to operate in a STB with “a second tuner,” or multiple tuners. *Id.* at Q/A 83-85; *supra* § IX.F.2.g.i (discussing modification to multi-tuner system with respect to Element A). Even if this were not the case, it would have been obvious to a POSITA to combine the teachings of the Prevue Guide with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “second tuner.” RX-0004C (Bederson WS) at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine).

Resps. Br. at 211-12.

The testimony that Comcast cites does not clearly address claim 10 or 22. Accordingly, the administrative law judge has determined that Comcast has not met its burden of showing claims 10 and 22 would have been obvious to a person having ordinary skill in the art.

(3) Alexander (RX-0155) in combination with the general knowledge of a POSITA, or in combination with Sano (RX-0152) or Chun (RX-0158), or in further combination with the Prevue Guide (RX-0073) or Nagano (RX-0153)

(a) Limitations 13a-d

Comcast argues:

Alexander teaches the use of an IPG used on STBs, which can be used to control the scheduling and recording of programs. RX-0004C (Bederson WS) at Q/A 95-97, 102. Using the IPG, Alexander teaches that tuner conflicts can be detected, displayed to the user, and then resolved through instructions from the user to, *e.g.*, revise the record instructions to eliminate the conflict. *Id.* at Q/A 98. In addition, Alexander taught the use of a first tuner and a second tuner within the STB. *Id.* at Q/A 99-102. However, to the extent that the second tuner of Alexander is only used for picture-in-picture viewing, it would have been obvious to combine the teachings of Alexander with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “second tuner.” *Id.* at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine). In addition, Alexander could further be combined with the conflict resolution systems of the Prevue Guide or Nagano, each of which teach conflict resolution system. *Id.* at Q/A 77-89 (the Prevue Guide); 103-111 (Nagano); 303-304, 309 (motivations to combine).

Resps. Br. at 215.

Rovi argues that Alexander lacks multiple tuners and tuner conflicts. Rovi Br. at 190. Rovi notes that one of the two timers in Alexander was for picture-in-picture service. *Id.* Rovi further challenges Comcast’s contention that one of ordinary skill in the art would

have been motivated to combine the references. *Id.* at 193-94.

The administrative law judge has determined that Alexander does not teach two tuners, as described and claimed in the '512 Patent. It is not clear that the second timer described in Alexander was capable of “performing [a] tuning operation,” such as recording a show. Further, Comcast has not shown, through clear and convincing evidence, that one of ordinary skill in the art would have combined the references as Comcast now asserts. As an initial matter, the testimony that Comcast cites, *e.g.*, RX-0004C (Bederson WS) at Q/A 95-102, 303-304, 309 does not clearly address combinations involving Alexander. For instance, Q/A 95-102 reproduce excerpts from Alexander, Q/A 74-74 and 114 are background questions on Sano and Chun (Alexander is never mentioned), and Q/A 302, 307, and 309 are generic answers to questions about combining all of “the various references discussed” (*see* Q/A 298). A combination involving Alexander is not discussed in this testimony. Accordingly, the testimony does not explain why a person of ordinary skill in the art would modify the primary reference, Alexander, in the first place. *See Plantronics*, 724 F.3d at 1354 (“Where, as here, the necessary reasoning is absent, we cannot simply assume that ‘an ordinary artisan would be awakened to modify prior art in such a way as to lead to an obviousness rejection.’”).¹⁵²

Consequently, the administrative law judge has determined that Comcast has not met its burden of showing that claim 13, as a whole, would have been

¹⁵² *See* n.92, *supra*.

obvious in view of the above references, because it has not provided a sufficient rationale for combining the references.

(b) Limitation 13e

Comcast argues:

Alexander teaches an IPG on a STB to receiving a request for a tuning operation, such as displaying or recording a programming. RX-0004C (Bederson WS) at Q/A 95-97.

Resps. Br. at 216.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(iii).

The administrative law judge has determined that the evidence shows that Alexander teaches this limitation. *See* RX-0004C (Bederson WS) at Q/A 95-97.

(c) Limitation 13f

Comcast argues:

Alexander teaches the determination of timer conflicts through its electronic program guide, which recognizes conflicts between recordings set by the user. RX-0004C (Bederson WS) at Q/A 98. While Alexander does not specifically teach “determining that neither a first tuner or a second timer are available. . .” it would have been obvious to a POSITA to modify the conflict detection system of Alexander to a STB with “a first tuner” and “a second tuner,” or multiple tuners, all capable of “perform[ing] the requested tuning operation.” *Id.* at Q/A

219. Even if this were not the case, it would have been obvious to a POSITA to combine the teachings of Alexander with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “first tuner” and a “second tuner.” RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine). In addition, Sano teaches that all of the M tuners in the STB are capable of tuning to television program in the broadcast stream for recording. RX-0004C at Q/A 74-75. This satisfies the limitation requiring “wherein the first tuner and the second tuner are both capable of performing the tuning operation.”

Resps. Br. at 216. Dr. Bederson’s testimony at Q/A 219 follows:

Q218. Let me direct your attention to the element [c] of claim 1. Did you form an opinion as to whether the “determining that neither a first tuner nor second tuner are available” where “both tuners are capable of performing the function” limitation is met by Alexander?

A218. Yes.

Q219. What is your opinion in this regard?

A219. It is my opinion that Alexander renders obvious the requirements of this limitation.

As I have previously testified in response to QUESTIONS 90-102, Alexander teaches a multi-tuner system that performs tuning operations in a system for receiving and recording broadcast programs. Alexander teaches two tuners to receive and display a first video and a picture-in-picture video. Alexander also incorporates by reference WO 96/07270 which states that two tuners are required to provide the disclosed picture-in-picture feature. To the extent that the PIP tuner is not a “second tuner,” it would have been obvious to one of ordinary skill in the art to modify the teachings of Alexander to incorporate a “first tuner” and a “second tuner.” ***One of ordinary skill in the art would have also know that the system of Alexander could be combined with a system that used multiple tuners, such as Sano or Chun.*** In addition, Alexander teaches an interactive program guide which recognizes conflicts and provides an alert to the user.

RX-0004C (Bederson WS) at Q/A 218-19 (emphasis added on relevant portion). This testimony is conclusory and does not explain why a person of ordinary skill in the art would modify the primary reference, Alexander, in the first place. *See Plantronics*, 724 F.3d at 1354 (“Where, as here, the necessary reasoning is absent, we cannot simply assume that ‘an ordinary artisan would be awakened

to modify prior art in such a way as to lead to an obviousness rejection.”).¹⁵³

Accordingly, the administrative law judge has determined that Comcast has not met its burden of showing that claim 13, as a whole, would have been obvious in view of the above references, because it has not provided a sufficient rationale for combining the references.

(d) Limitation 13g

Comcast argues that this limitation is met based upon the evidence cited for limitations 13a-f. *See* Resps. Br. at 216-17 (citing RX-0004C (Bederson WS) at Q/A 97-98, 219, 74-75, 114, 302, 307, 309). Comcast then argues that it would have been obvious for a person of ordinary skill to further combine the Prevue Guide or Nagano to satisfy this limitation. *Id.* at 217 (citing RX-0004C (Bederson WS) at Q/A 222). Dr. Bederson testified:

Q221. Let me direct your attention to element [d] of claim 1. Did you form an opinion as to whether the “displaying an alert” that “provides an opportunity to direct the interactive television program to cancel a function of the second tuner” limitation is met by Alexander?

A221. Yes.

Q222. What is your opinion in this regard?

¹⁵³ *See* n.92, *supra*.

A222. It is my opinion that Alexander renders obvious element [d] of the '512 patent. Alexander teaches that when a conflict is detected, the system will provide a warning to the user and provides the ability to resolve the conflict. Additionally, one of ordinary skill in the art would understand that the teachings of Alexander could be combined with either the teachings of the Prevue Guide or Nagano, which disclose the resolution of tuner conflicts.

Dr. Bederson's testimony that the references "could be" combined does not explain why one of ordinary skill in the art would combine them.

Accordingly, the administrative law judge has determined that Comcast has not met its burden of showing that claim 13, as a whole, would have been obvious in view of the above references, because it has not provided a sufficient rationale for combining the references.

(e) Claims 10 and 22

Comcast argues:

When a conflict has been detected, Alexander teaches "displaying a display screen using the interactive program guide that provides the user with a first option to continue to perform the function of the [] tuner, and with a second option to cancel the function of the [] tuner to perform the requested tuning operation." RX-0004C (Bederson WS) at 97-98; *supra* IX.F.2.h.iv. The

conflict resolution system of Alexander could have easily been modified by a POSITA to operate in a STB with “a second tuner,” or multiple tuners. *Id.* at Q/A 219. Even if this were not the case, it would have been obvious to a POSITA to combine the teachings of Alexander with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “second tuner”. RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine). Further, if Alexander’s teachings of resolving recording conflicts are insufficient to meet the conflict resolution aspect of this limitation, it would have been obvious to a POSITA to further combine the teachings of Alexander with the teachings of the Prevue Guide or Nagano, thereby satisfying this limitation. *Id.* at 222; *supra* IX.F.2.h.iv.

Resps. Br. at 217-18.

The administrative law judge has determined that Comcast has not met its burden of showing claims 10 and 22 would have been obvious through clear and convincing evidence. The cited testimony does not address either claim.

(4) Nagano (RX-0153) in combination with the general knowledge of a POSITA, and/or Sano (RX-0152) or Chun (RX-0158)

(a) Limitations 13a-d

Comcast argues:

Nagano teaches the use of an IPG running on an STB and conflict resolution when overlapping recordings are set, offering an alert to the user that allows canceling one of recordings to resolve the conflict. RX-0004C at Q/A 258; 106-111. In particular, Nagano taught the detection of conflicts between set recordings (*id.* at Q/A 109), and when a conflict or recording was detected, Nagano would provide a cancel option to cancel a recording, and a cursor to change the ending times of overlapping programs, either of which would resolve the conflict. *Id.* at Q/A 110-111.

Nagano does not explicitly disclose or teach the use of multiple tuners within the STB. However, it would have been obvious to a POSITA to utilize the IPG of Nagano in a STB with multiple tuners. *Id.* at Q/A 107, 83-85. Also, it would have been obvious to a POSITA to combine the teachings of the Prevue Guide with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “first tuner” and a “second tuner.” RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine).

Resps. Br. at 218.

Rovi argues:

. . . (1) Nagano has only a single tuner and therefore does not meet the requirement of a “first tuner” and a “second tuner” (and all other requirements that refer to the second tuner); and (2) Nagano only discloses timer conflicts and therefore, does not meet the limitation of “determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation” or “cancel a function of the second tuner.” CX-1902C (Balakrishnan RWS) at Q/A 130-34; Section VI(K)(3)(a), *supra*.

In Nagano, if a user “reserves” the tuner to record two programs being broadcast at the same time, then Nagano teaches methods for resolving that conflict involving a single tuner using cursors to change start and end times of recordings to eliminate overlaps and therefore eliminate timing conflicts. CX-1902C (Balakrishnan RWS) at Q/A 130.

Like LaJoie, Nagano thus discloses only a single tuner capable of performing a tuning operation. *Id.* at Q/A 134. The examiner found the claims of the '512 Patent patentable over LaJoie in view of Kim and Lee, which disclosed two tuners. *Id.* Again, the claims of the '512 Patent are similarly patentable over Nagano.

Rovi Br. at 192.

The administrative law judge finds that Nagano and Sano (or Chun) teach limitations 13a-d. Nagano teaches an interactive guide, while Sano (or Chun) teaches a set-top box with two tuners. *See* RX-0004C (Bederson WS) at Q/A 258, 103-11, 83, 114.

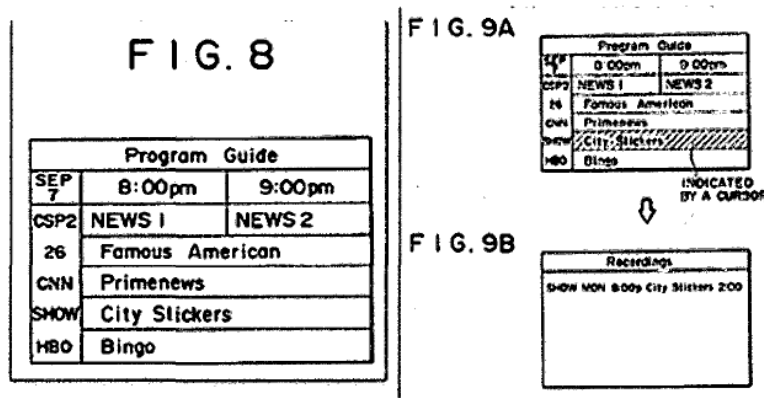
Nagano teaches an interactive guide in the abstract, specification, and figures. In the abstract, Nagano discloses a guide that allows a user to set recordings:

An apparatus and a method for controlling the recording of television programs are disclosed. The apparatus displays electronic program guide information superposed on a television signal. ***The apparatus allows a plurality of desired programs to be reserved for recording based on the electronic program guide information.*** If any of the reserved programs overlap, the apparatus allows the starting time and/or ending time of any of the overlapped programs to be changed. The apparatus may permit a program to be reserved for recording by inputting recording time and recording channel. If a program reserved for recording based on the electronic program guide information overlaps a program reserved for recording by inputting recording time and recording channel, a preferential setting enables one of the overlapped programs to be recorded. The apparatus advantageously causes an icon to be continuously displayed on a television screen in

connection with the television picture signal when a program is reserved for recording. A corresponding method is described.

RX-0153 at Abstract (emphasis added); *id.* at 1:55-2"9 ("When the program to be recorded is displayed on the screen, a cursor is moved to the row of the program to be recorded by operating the cursor moving key. . . by pushing the program reservation button (Rec key) in this condition, the recording of this program is reserved."); RX-0004C (Bederson WS) at Q/A 105, 108.

Nagano refers to Figures 8, 9A, and 9B to depict a program guide and steps for using that guide. Figures 8, 9A, and 9B follow:



The specification explains that:

FIG. 8 is a diagram for illustrating a menu picture of the electronic program guide.

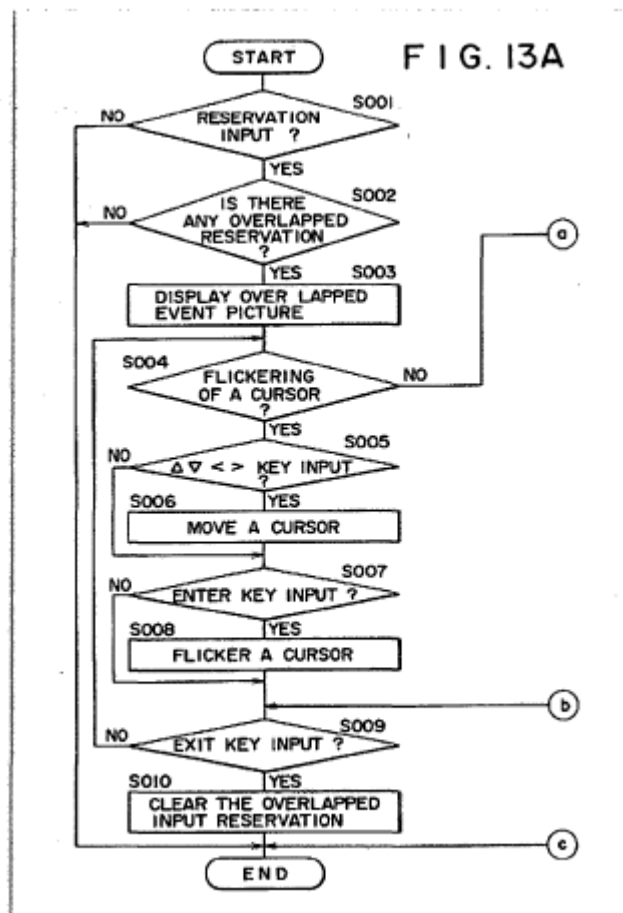
FIG. 9 is a set of diagram for illustrating a picture display of a method for program

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reservation using the electronic program guide.

RX-0153 at 5:54-58 (Figs. 15-17 provide additional guide-screen examples).

Further, Figure 13A is a flowchart for interacting with the guide:

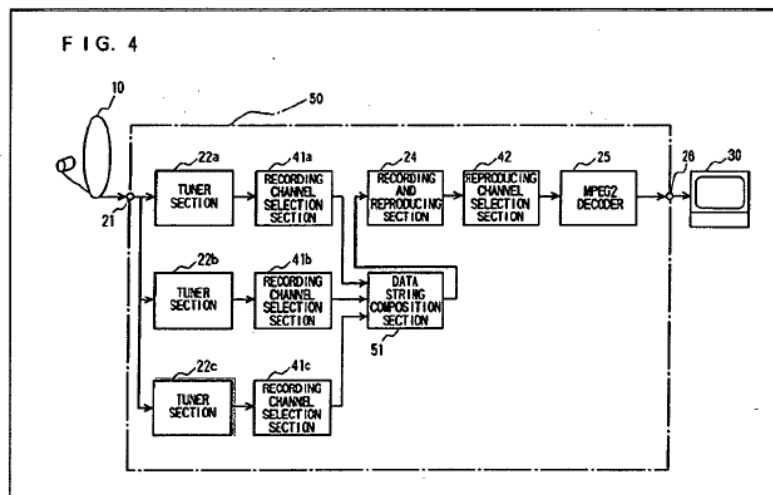


RX-0153 at 12. The specification explains that “FIG. 13 is a flowchart for illustrating the processing when program reservation by the first reservation means in accordance with the embodiment of the present invention overlaps.” *Id.* at 6:5-8. Accordingly, Nagano teaches the interactive guide that satisfies limitations 13a-d.

Sano teaches a set-top box with two tuners. Dr. Bederson explained:

A74 Sano teaches the use of multiple tuners, which can simultaneously receive and record multiple broadcast channels.

Fig. 4 of Sano show one example of this utilizing three tuners to receive and record broadcast signals:



[Sano at Fig. 4 (annotations added)]

Col. 10:21-29: "To solve such a problem, in the embodiment shown in FIG. 4, by providing a plurality of tuner sections 22 and recording channel selection sections 41, it was enabled to record a plurality of programs arbitrarily selected from multi-channel multiplex broadcasts by a plurality of transponders. FIG. 4 is a view showing a system configuration including a digital broadcast recording and reproducing apparatus 50 according to the third embodiment of the present invention."

In fact, Dr. Balakrishnan agrees that Sano teaches multiple tuners. *See* Balakrishnan 10/29/16 Dep. Tr. 257:11-14.

RX-0004C (Bederson WS) at Q/A 74. As Figure 4 shows, Sano teaches three tuners, which satisfies the first and second tuner requirements of limitations 13a-d.

Chun also teaches two tuners. Dr. Bederson explained:

Chun generally discloses the use of two tuners, both of which were capable of tuning broadcast television for display. One tuner could be used for primary video, and a second tuner could be used for picture-in-picture, and each tuner could be used for either of these purposes.

Abstract: "A menu type multi-channel display system utilizing picture-in-

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picture (PIP) function and a page up/down mode. The present invention first comprises a first and second tuner to receive broadcasting signals and to output each of the broadcasting signals on a channel. . . .”

Further, Chun provided for two tuners for use in tuning television signals for display.

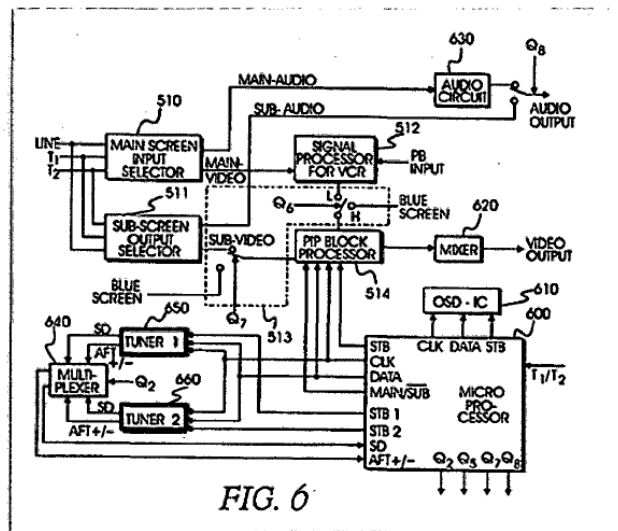


FIG. 6

[Chun at Fig. 6 (annotations added)]

1:32-57: “The invention provides a menu-type multi-channel video display system with page up/down mode comprising . . . a television tuner circuit, a VCR signal processing circuit, a switching circuit, a PIP processing circuit, an input selector for the main screen, an output selector

for the sub-screen, a microcomputer, an on-screen display integrated circuit (OSDIC), a mixer, an audio circuit, two tuners, and a multiplexer.”

As Figure 6 shows, Chun teaches two tuners, which satisfies the first and second tuner requirements of limitations 13a-d. Given the overlap between the teachings of Sano and Chun, as presented by Comcast, the administrative law judge finds that Chun is cumulative of Sano’s disclosure.

(b) Limitation 13e

Comcast argues:

Nagano teaches “receiving a request for a tuning operation,” such as using a tuner to display and record broadcast programs. RX-0004C (Bederson WS) at Q/A 105-107.

Resps. Br. at 218-19.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(iv).

The administrative law judge has determined that the evidence shows that Nagano teaches this limitation. *See* RX-0004C (Bederson WS) at Q/A 105-07, 260.

(c) Limitation 13f

Comcast argues:

Nagano detects conflicts between recordings and also determines if there are overlaps between recordings. RX-0004C (Bederson WS) at Q/A 109-110. The conflict detection system of the

Nagano could have easily been modified by a POSITA to operate in a STB with “a first tuner” and “a second tuner,” or multiple tuners. *Id.* at Q/A 107, 83-85. It also would have been obvious to a POSITA to combine the teachings of the Nagano with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “first tuner” and a “second tuner.” RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine). In addition, Sano teaches that all of the M tuners in the STB are capable of tuning to television program in the broadcast stream for recording. RX-0004C at Q/A 74-75. This satisfies the limitation requiring “wherein the first tuner and the second tuner are both capable of performing the tuning operation” which the examiner found missing during prosecution.

Resps. Br. at 219.

Rovi does not address Comcast’s argument that Sano teaches the second tuner. *See generally* Rovi Br., Section VI(K)(3)(b).

Dr. Bederson testified that Nagano (and the Prevue Guide) recognized tuner conflicts, and that a person of ordinary skill knew of multiple tuners, would have been able to modify Nagano (and Prevue) to accommodate multiple tuners, and that the modification would not have been complicated. *See* RX-0004C (Bederson WS) at Q/A 107, 82-86, 302, 307, and 309. Indeed, one of ordinary skill in the art would have

needed to modify Nagano when porting it on a set-top box with multiple tuners.

The administrative law judge has determined that the evidence shows that a person of ordinary skill would have been able to modify Nagano for a two-tuner set-top box, such that Nagano and Sano teach and satisfy this limitation. *See* RX-0004C (Bederson WS) at Q/A 107, 82-86, 302, 307, and 309.

(d) Limitation 13g

Comcast argues:

When a conflict is detected, Nagano, “display[s] an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the [] tuner to permit the [] tuner to perform the requested tuning operation.” In order to resolve a potential conflict, Nagano uses the IPG to display the overlapped display picture, and provides the ability to cancel a recording. R-0004C at Q/A 110-111. Nagano teaches that the user can cancel a function of the tuner (*i.e.*, cancel a portion of the recording) of either the first overlapping program (*e.g.*, change the ending time of the first recorded program) or second overlapping program (*e.g.*, change the starting time of the second recorded program). *Id.* at Q/A 111.

Nagano could have easily been modified by a POSITA to operate in a STB with multiple tuners. *Id.* at Q/A 107, 83-85. It

would have also been obvious to a POSITA to combine the teachings of the Nagano with the teachings of Sano or Chun, which teach multiple tuners within a STB. RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine).

Resps. Br. at

Rovi argues this combination does not satisfy the limitation, as combining Nagano and Sano would eliminate “the very problem that Nagano sought to solve with his invention.” *See* CX-1902C (Balakrishnan RWS) at Q/A 131; *see also* Rovi Br. at 192.

The administrative law judge has determined that the evidence shows that a person of ordinary skill would have been able to modify Nagano for a two-tuner set-top box, such that Nagano and Sano teach and satisfy this limitation. *See* RX-0004C (Bederson WS) at Q/A 107, 110-11, 82-86, 135, 74-75, 302, 307, and 309. It particular, the administrative law judge finds that it would have taken only ordinary skill to modify Nagano’s alert to cancel a function of the second tuner. *Id.* The combination would not eliminate Nagano’s solution to managing limited tuner resources, as the combination would still have a finite number of tuners. Accordingly, the administrative law judge finds that the combination would not eliminate “the very problem that Nagano sought to solve” and the combination of Nagano and Sato teaches limitation 13g.

(e) Claims 10 and 22

Comcast argues:

When a conflict has been detected, Nagano teaches “displaying a display screen using the IPG that provides the user with a first option to continue to perform the function of the [] tuner, and with a second option to cancel the function of the [] tuner to perform the requested tuning operation.” To resolve a conflict, Nagano uses the IPG to display the overlapped recording events, and provides a cursor to cancel a portion of either recording, and a cancel key to cancel a recording request. RX-0004C (Bederson WS) at Q/A 110-111; *supra* IX.F.2.i.iv. As discussed above, the conflict resolution system of Nagano could have easily been modified by a POSITA to operate in a STB with “a second tuner,” or multiple tuners. *Id.* at Q/A 107, 83-85. In the alternative, it would have been obvious to a POSITA to combine the teachings of Nagano with the teachings of Sano or Chun, each which teach the use of multiple tuners within a STB, including a “second tuner.” RX-0004C at Q/A 74-75 (Sano), 114 (Chun), 302, 307, 309 (motivations to combine).

Resps. Br. at 211-12.

Rovi does not rebut this argument. *See generally* Rovi Br., Section VI(K)(3)(b)(iv).

The administrative law judge has determined that the evidence shows that Sano teaches the subject matter of claims 10 and 22. *See* RX-0004C (Bederson

WS) at Q/A 107, 110-11, 82-86, 135, 74-75, 302, 307, and 309.

(5) Secondary Considerations

Comcast argues:

Rovi has not demonstrated any secondary considerations of non-obviousness with a nexus to the '512 patent. RX-0004C at Q/A 310-311. There is no particular indication of commercial success or long felt need, and in fact Rovi declined to expand the Prevue Guide to multi-tuner STBs because such STBs were not widely distributed due to cost. *Id.* at Q/A 17. The simultaneous creation by many others of systems to resolve conflicts, including in multi-tuner STBs, further underscores the obviousness of the '512 claims. *Id.* at Q/A 315. There is no praise by others or skepticism identified by Rovi specific to the '512 patent. *Id.* at Q/A 316-317. Rovi cannot identify any teaching away, recognition of a unique problem, or unexpected results either; the claims of the '512 simply call for use of well-known concepts to address a well-understood problem to achieve an obvious result. *Id.* at Q/A 318-320.

Resps. Br. at 220.

Rovi argues that the '512 Patent was a commercial success, due to Rovi's licensing program, and that the '512 Patent satisfied a long-felt need. Rovi Br. at 194-96. Rovi's arguments are addressed below.

(a) Licensing Success

Rovi argues:

. . . As discussed in Section V(H)(3), *supra*, Rovi's licensing program has been tremendously successful. []

CX-0001C (Armaly WS) at Q/A 58.

. . . The importance of the '512 Patent to Rovi's licensing program is illustrated by the number of negotiations in which it was presented, and importantly, the particular licensees to whom it was presented. CX-1905C (Putnam RWS) at Q/A 156. []

Rovi Br. at 194-95 (introductory headings omitted).

The Federal Circuit specifically requires "affirmative evidence of nexus where the evidence of commercial success presented is a license, because it is often cheaper to take licenses than to defend infringement suits." *In re Cree*, 818 F.3d at 703 (quotations omitted). The Federal Circuit explained that

When the specific licenses are not in the record, it is difficult for the court to determine if "the licensing program was successful either because of the merits of the claimed invention or because they were entered into as business decisions to avoid litigation, because of prior business relationships, or for other economic reasons."

Id. (citing *In re Antor Media Corp.*, 689 F.3d 1282, 1294 (Fed. Cir. 2012)).¹⁵⁴ In general, the existence of a license alone is insufficient to show that the licensed patent was a commercial success. See *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004) (“Without a showing of nexus, “the mere existence of . . . licenses is insufficient to overcome the conclusion of obviousness” when there is a strong *prima facie* case of obviousness.”); see also *Amazon.com*, 2016 WL 1170773 at *17 (“Mr. Holtzman’s testimony lists patent family licenses and revenue, but does not discuss the merits of the challenged claim as they relate to any particular license for the ’956 patent in the portfolio of licenses. . . . [this] does not establish whether a specific license (or licensing clause, etc.) for the ’956 patent occurred because of the merits of the challenged claim, the merits of unchallenged claims, for other patented inventions, or for other economic reasons related to the whole ’956 patent family.”).

¹⁵⁴ In *Antor Media*, 689 F.3d at 1294, the Federal Circuit criticized evidentiary support that is similar to the present investigation:

Antor merely lists the licensees and their respective sales revenue. The licenses themselves are not even part of the record. Antor provides no evidence showing that the licensing program was successful either because of the merits of the claimed invention or because they were entered into as business decisions to avoid litigation, because of prior business relationships, or for other economic reasons. The Board was thus correct in holding that the existence of those licenses is, on its own, insufficient to overcome the *prima facie* case of obviousness.

[]¹⁵⁵

The evidence does not show, however, that these licenses are based on the merits of the patents as opposed to a business decision to avoid litigation, a prior business relationship, or other economic reason. *See In re Cree*, 818 F.3d at 703; *In re Antor Media*, 689 F.3d at 1294. Further, neither Rovi nor Dr. Putnam point to a license distinctly identifying the '512 Patent, which is asserted and at issue in this case. Accordingly, the administrative law judge has determined that Rovi has not shown that licensing of the '512 Patent—apart from the portfolio—has been a success.

(b) Long-Felt Need

Rovi's entire argument is:

The inventions of the '512 Patent fulfilled the long-felt need for a sophisticated program guide that can perform an allocation of functions amongst multiple tuners. The claimed inventions met a need for more flexibility and interruption-free use of the multi-tuner system. CX-1904C (Williams RWS) at Q/A 93-96. At the time of the invention, some persons of ordinary skill in the art would have expressed skepticism of such solutions. *Id.*

Rovi Br. at 196.

¹⁵⁵ It is not readily apparent whether the licenses are in the record or if Dr. Putnam read them. *See generally* CX-1905C (Putnam RWS) at Q/A 75-79.

Long-felt need “is analyzed as of the date of an articulated identified problem and evidence of efforts to solve that problem.” *Texas Instruments Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1178 (Fed. Cir. 1993).

Rovi’s evidence consists of conclusory expert testimony. *See, e.g.*, CX-1904C (Williams RWS) at Q/A 93-96. Mr. Williams did not identify the date when the long-felt need first began (*i.e.*, Mr. Williams did not analyze the need “as of the date of an articulated identified problem and evidence of efforts to solve that problem,” per *Texas Instruments*)).¹⁵⁶ *Id.* Further, Mr. Williams’s testimony simply parrots Rovi’s contentions and concludes by agreeing with them; no outside evidence is cited to support Rovi’s contentions or Mr. Williams’s opinion. *Id.*

Accordingly, the administrative law judge has determined that this testimony is insufficient to find a long-felt need, and that this factor does not support non-obviousness.

*(c) Weighing the Secondary
Consideration Factors*

On the whole, Rovi’s commercial success evidence and long-felt need arguments are of negligible probative value and fail to support a finding that the ’512 Patent is not obvious. Thus, the evidence does not have a perceptible impact on the obviousness calculus.

b) Indefiniteness

¹⁵⁶ While Mr. Williams discussed the 1992, 1998, and 1999 timeframes, those discussions were not cited by Rovi, and the discussions relate to the priority dates of the patents, not the dates when the alleged need arose.

Comcast's entire argument is:

Claim 13 recites an “an interactive television program guide implemented on the system . . . operative to.” As discussed above, this term should be properly construed as a means-plus-function term. But, the only structure provided is a general purpose processor. JX-0006 at 4:66-5:2 (“Each set-top box 112 preferably contains a processor to handle tasks associated with implementing a interactive television program guide application on the set-top box 112.”) But, in cases involving a special purpose computer-implemented means-plus-function limitation, as we have here, the Federal Circuit has consistently required that the structure be more than simply a general purpose computer or microprocessor and that the specification must disclose an algorithm for performing the claimed function. *See, e.g., Noah Systems Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012). There is no such algorithm identified here, and in particular, no algorithm for the steps of (1) receiving a request, (2) determining a conflict, or (3) displaying an alert. RX-0004C (Bederson WS) at Q/A 66-69. Accordingly, claim 13 should be held invalid as indefinite under §112(6).

Resps. Br. at 221.

The full text of the disputed phrase appears in bold, italicized text:

13. A system for resolving a conflict when multiple operations are performed using multiple tuners controlled by an interactive television program guide, the system comprising:

a first tuner;

a second tuner; and

an interactive television program guide implemented on the system, wherein the interactive television program guide is operative to:

receive a request to perform a tuning operation;

determine that neither the first tuner nor the second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and

in response to the determination, display an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

JX-0006 at 19:41-59.

The administrative law judge construed the contested phrase “interactive television program guide implemented on the system, wherein the interactive

television program guide is operative to: receive . . .; determine . . .; and in response to the determination, display . . .” and addressed Comcast’s indefiniteness argument in Section VI(F)(2)(b)(14), above. Claim 13 is not found to be indefinite.

8. Patent Eligibility

Comcast argues that the asserted claims are directed to the abstract idea of providing an alert “receiving a request to perform a tuning operation, determining that a tuner is not able to perform that operation, and then displaying an alert to the user.” Resps. Br. at 203. Comcast relies upon *Comcast IP Holdings I, LLC v. Sprint Commc’ns Co. L.P.*, 55 F. Supp. 3d 544, 548-549 (D. Del. 2014), which found a claim directed toward a telephone network optimization method ineligible. *Id.* Comcast provides the following comparison between claim 1 of the ’512 Patent and claim 21 from *Comcast IP Holdings*:

Rovi '512 Patent

1. A method for resolving a conflict when multiple operations are performed using multiple tuners controlled by an interactive television program guide, the method comprising: receiving a request to perform a tuning operation; determining that neither a first tuner nor a second tuner are available to perform the requested tuning operation, wherein the first tuner and the second tuner are both capable of performing the tuning operation; and in response to the determination, displaying an alert that provides a user with an opportunity to direct the interactive television program guide to cancel a function of the second tuner to permit the second tuner to perform the requested tuning operation.

JX-0006, '512 Patent at Claim 1

Invalidated U.S. Pat. No. 6,873,694

21. A telephony network optimization method, comprising:
 receiving a request from an application to provide to the application service on a telephony network; and
 determining whether a telephony parameter associated with the request requires acceptance of a user prompt to provide to the application access to the telephony network.

Invalidated '694 Patent at Claim 21

Comcast then argues that claim 1 does not contain an inventive concept. This is Comcast's inventive-concept argument:

The asserted claims of the '512 patent consist of "well-understood, routine, conventional activity," and contain nothing to transform them to a patent eligible application. *See Mayo*, 132 S.Ct. at 1297. To persons of ordinary skill in the art, the asserted claims are nothing more than implementation of the well-known concept of a "conditional execution" statement" (*i.e.*, an "if statement"). RX-0004C at Q/A 20. And there is little dispute among the parties' experts that the claims were directed to well-known and standard software and hardware features (multiple tuners were known). *See* Tr. 1175:1-12 (interactive television program guides and receiving turning requests were known); RX-0004C at Q/A 21 (alert upon detection of resource conflict was well-known). And in fact, recent case law has even found these types of hardware conventional. *See Tech. Dev. Lic., LLC v. General Instrument Corp.*, 2016 WL 7104253, *6 (N.D. Ill., Dec. 6, 2016) (tuner, remote control, processor).

Rovi contends that because tuner conflicts could be resolved in other ways not covered by the '512 claims - *e.g.*, by prioritizing program types of one kind over another or selections of one user over another – but this provides no evidence that the claims of the '512 patent are inventive. The concept of allowing the user select the operation

(e.g., recording or displayed program) to be canceled was well known. RX-0004C Q/A 24-26, 43-44, 52-53, 81, 86. And Rovi cannot expect to rely on the examiner's notice of allowance as indication of novelty sufficient to preserve patent eligibility. The notice of allowance in the '512 prosecution contained a generic statement that the prior art did not teach all the elements of the claims. But, by that measure, no patent claim would ever be found ineligible. Every issued patent claim has been subject to examiner review and found to contain elements not present in the prior art.

Resps. Br. at 205-06.

Rovi argues that the claims are not directed toward an abstract idea and that even if they are, the claims contain an inventive concept. Rovi Br. at 196-201.

a) Alice Step One: Abstract Idea

The administrative law judge finds that the asserted claims are not directed toward an abstract idea.¹⁵⁷ Here, in summary, claim 1 pertains to a cable system (e.g., a set-top box) having multiple tuners that:

- 1) Receives a request to record or watch a show;
- 2) Determines whether a tuner is or is not available to record or watch the show;

¹⁵⁷ The administrative law judge finds Comcast has not met its burden under both the preponderance-of-the-evidence and clear-and-convincing standards.

- 3) Displays a prompt allowing the user to record or watch the requested show or to cancel the request.

The claim language indicates that the predominant concept of claim 1 is confined to a concrete, tangible application in set-top boxes.¹⁵⁸ As Rovi notes, “these claims expressly recite a solution to a problem that necessarily arises only ‘when multiple operations are performed using multiple tuners controlled by an interactive television program guide.’” Rovi Br. at 196-97 (quoting JX-0006 (’512 Patent) at 18:35-47). Indeed, the administrative law judge found that the accused X1 products did not infringe claims 1 and 13 at least because the Rovi had not shown that the X1 set-top boxes have a second tuner. *See generally* Section IV(F)(4)(b)(1)(a). Likewise, Comcast’s obviousness combinations acknowledge that various prior art references contain tuners and various prompts and alerts. *See generally* Section IV(F)(7)(a). Accordingly, Comcast has not met its burden of showing that claims 1 or 13 are directed toward an abstract idea.

b) Alice Step Two: Inventive Concept

The administrative law judge has determined that Comcast fails to demonstrate that the ’512 Patent does not contain an inventive concept.¹⁵⁹

For inventive concept, “the key question is whether the claims add something to the abstract idea so that the patent covers a specific application of the abstract

¹⁵⁸ Claim 13 is also confined to a concrete, tangible application in set-top boxes.

¹⁵⁹ The administrative law judge finds Comcast has not met its burden under both the preponderance-of-the-evidence and clear-and-convincing standards.

idea, rather than the idea itself.” *Netflix v. Rovi*, 114 F. Supp. 3d at 937.¹⁶⁰ Here, the inventive concept is the application of a single-tuner-conflict-management system to systems with multiple tuners. While that concept may not satisfy §§ 102 and 103, the concept is clearly new and useful, and is confined to a set-top box having two tuners (*e.g.*, an article of manufacture), such that it passes § 101’s eligibility filter. *See* 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1327 (Fed. Cir. 2016) (the inventive concept is not focused on “economic or other tasks for which a computer is used in its ordinary capacity.”). Accordingly, the administrative law judge has determined that Comcast has not met its burden of demonstrating that the ’512 Patent lacks an inventive concept.

V. ADDITIONAL DEFENSES

A. Comcast’s Express and Implied Licensing Defenses

“An express or implied license is a defense to infringement.” *Radar Indus., Inc. v. Cleveland Die & Mfg. Co.*, 424 F. App’x 931, 933 (Fed. Cir. 2011). “The burden of proving that an implied license exists is on the party asserting an implied license as a defense to

¹⁶⁰ *Netflix, Inc. v. Rovi Corp.*, 114 F. Supp. 3d 927, 937 (N.D. Cal. 2015), *aff’d*, No. 2015-1917, 2016 WL 6575091 (Fed. Cir. Nov. 7, 2016) (Fed. Cir. R. 36).

infringement.” *Augustine Med., Inc. v. Progressive Dynamics, Inc.*, 194 F.3d 1367, 1370 (Fed. Cir. 1999).

1. Overview of Agreements

Rovi and Comcast entered into several commercial and licensing agreements in 2004 and 2010. The 2010 agreements amend and restate the 2004 agreements.

a) 2004 Agreements (JX-0046C)

On March 31, 2004, Comcast and a Rovi predecessor formed a joint venture, which became known as Guideworks, for the purpose of owning and developing IPGs for use by Comcast, among others. *See* Resps. Br. at 17. The formative document, JX-0046C, is entitled “FORMATION OF CABLE IPG JOINT DEVELOPMENT GROUP and ENTRY INTO LICENSE AND DISTRIBUTION AGREEMENT AND PROGRAMMING AGREEMENTS.” JX-0046C at 1. JX-0046C includes patent and software licenses.

Comcast points to JX-0046C at 15 (and 23-24), § 2.04, as the clause that granted Comcast a license to software the joint venture created. Resps. Br. at 17. For background, section 2.04 follows:

4. []

JX-0046C at 15 (underlining in original); *see also* RX-0001C at Q/A 15.

Additionally, JX-0046C contains a “LICESE A ND DISTRIBUTION AGEEMENT” that includes a patent licensing clause, § 1(b). For background, § 1(b) follows:

(b) []

JX-0046C at 393-94 (underlining in original). Comcast refers to the license and distribution agreement as the “LDA,” while Rovi refers to this agreement as the

“Patent License.” *Compare* Resps. Br. at 17 (referring to JX-0046C at 393-94 as the “2004 LDA”) *with* Rovi Br. at 4 (referring to JX-0047C, Ex. A (Patent License)).

b) 2010 Agreements (JX-0050C, JX-0052C, and JX-0053C)

In February 2010, Comcast and Rovi ended the Guideworks joint venture, with Comcast acquiring Guideworks. RX-0001C (Marcus WS) at Q/A 19-21 (identifying JX-0053C as the 2010 Master Agreement); *see also* Rovi Br. at 381.

At the same time, the parties also entered into an amended license and distribution agreement, JX-0050C, which is titled “AMENDED AND RESTATED LICENSE AND DISTRIBUTION AGREEMENT.” Comcast refers to JX-0050C as the “ALDA,” while Rovi refers to it as the “Patent License” or the “2010 Amended Patent License.” *Compare* Rovi Br. at 4 *with* Resps. Br. at 18. JX-0050C provides a patent license, in § 1(b), as follows:

(b) []

JX-0050C at 5 (emphasis added; underlining in original). Section 8 of the agreement lays out fees and rebates. *Id.* at 17. Section 17 explains the license expires on March 31, 2016. *Id.* at 34 (“The term (the ‘TERM’) of this AGREEMENT shall commence on March 31, 2004 and shall end on March 31, 2016.”).

At the same time, the parties also entered a cross license concerning software, JX-0052C, which is titled “CROSS LICENSE AGREEMENT.” Comcast refers to JX-0052C as the “ALDA,” while Rovi refers to it as the “Software License” or the “2010 Software License.”

Compare Rovi Br. at 4 *with* Resps. Br. at 18. Comcast points to § 2.01, which follows:

[]

Resps. Br. at 18 (citing JX-0052C at 8; emphasis in original). Rovi points to § 2.03, which follows:

[]

Rovi Br. at 382 (citing JX-0052C at 9 (§ 2.03)).

2. Express License

Rovi frames its allegations, as follows:

Rovi accuses all digital video receivers and hardware and software components thereof, including all products capable of supporting Comcast's X1 or Legacy Guide, that are or were: (1) products purchased by Comcast on or after April 1, 2016, regardless of when they were imported; (2) products installed by Comcast into its customer base on or after April 1, 2016, regardless of when they were purchased by Comcast or imported; and (3) products that Comcast now holds in inventory and that Comcast will, in the normal course of business, install into Comcast's customer base on or after April 1, 2016, regardless of when they were purchased by Comcast or imported. Rovi also accuses all Technicolor and ARRIS products capable of supporting Comcast's X1 or Legacy Guide, that are or were: (1) products imported on or after April 1, 2016 and sold to Comcast; (2) products sold to

Comcast on or after April 1, 2016, regardless of when they were imported; and (3) products that Technicolor or ARRIS hold in inventory for sale to Comcast, regardless of when they were imported.

Rovi Br. at 10-11.

Comcast argues:

Under the ALDA, Comcast had an express patent license to Rovi's entire patent portfolio covering all of Comcast's products and services, including both Legacy and X1 STBs, for the period prior to March 31, 2016. *All* of the Legacy STBs at issue in this Investigation, and [[]] units of the accused X1 STBs, were imported and sold to Comcast before Comcast's license to Rovi's patent portfolio expired. RX-0386C [(Q2 2016 Leased [] Strategy)] at .0011; RX-0838C (Shank Rebuttal WS) at QA 28-29, 34, 36-37.

...

Because all Legacy STBs and certain X1 STBs were covered by an express patent license at the time of importation and sale to Comcast, there is no violation as to those STBs.

Resps. Br. at 19-20. Comcast adds that "Rovi's theory—that direct or indirect infringement may be found based on purely domestic conduct after a fully licensed importation—is contrary to Section 337 itself,

which underscores that any violation must be founded on unlawful acts related to importation.” *Id.* at 21.

Rovi presents relevant argument in its jurisdictional analysis:

Congress designed Section 337 to provide for, *inter alia*, cease-and-desist orders that bar an infringer’s distribution of imported products in inventory—exactly the remedy that Rovi seeks here with respect to the products imported prior to the expiration of the Patent License. Nonetheless, Respondents argue that products imported prior to April 1, 2016 (i.e., during the term of the License) do not provide a basis for a violation of Section 337, because in their view only articles that “infringe at the time of importation” may violate Section 337. . .

Congress has explained that Section 337 is designed to vest the Commission with enforcement authority “broad enough to prevent every type and form of unfair practice.” *Suprema, Inc.*, 796 F.3d at 1350. Comcast’s sale or lease of imported products in its inventory after importation is exactly the type of unfair practice that Section 337 was designed to redress by way of a cease-and-desist order.

Congress specifically envisioned that Section 337 would prevent infringers from building inventory of imported, infringing products in the United States.

Congress amended Section 337 again in 1988 to allow the Commission to issue exclusion orders and cease-and-desist orders as to the same Respondent, such that the cease-and-desist order would apply to products that have been “stockpiled,” and the exclusion order would apply to products that have yet to be imported. *Id.*; H.R. Rep. No. 40, 100th Cong., 1st Sess. at 59-60. That is the circumstance here: Rovi seeks an exclusion order as to X1 and Legacy Products that have yet to be imported, and a cease-and-desist order as to those products that were stockpiled in inventory.

Rovi Br. at 14-16.

The 2010 Patent License, JX-0050C, permits Comcast (and authorized third parties) to “make and have made” and to “use, sell, offer for sale, lease, offer for lease, import, deploy, distribute or otherwise commercialize” products that practice Rovi’s Patents. JX-0050C at 5 (§ 1(b)). Thus, the license expressly allows Comcast, along with its suppliers, to import products before April 1, 2016.¹⁶¹ Accordingly, the administrative law judge has determined that products imported before April 1, 2016 are not unlawful imports, and there has been no an unfair act which would constitute a violation Section 337 for

¹⁶¹ The evidence shows that Comcast paid [] for the 12-year license, along with significant additional payments following the 2010 restatement. *See* RX-0001C (Marcus WS) at Q/A 17-18, 35 (over [], based on Mr. Marcus’s approximation of [] per year in fees); Tr. 156-157.

these products. The administrative law judge makes no determination on whether a subsequent domestic activity connected to products imported before April 1, 2016 (*e.g.*, any use or sale, completed on or after April 1, 2016, of a set-top box imported before April 1, 2016) infringes the asserted patents.

3. Implied License

Comcast argues:

... [] By licensing to Comcast [] to the Legacy guides' software, the CLA provides Comcast an implied license to any Rovi patent implicated by that software. Rovi is estopped from derogating from the rights that it granted to Comcast in the CLA by pursuing patent infringement claims based on the very same software []. *Wang*, 103 F.3d at 1581-82.

...

Comcast entered into a JV with Rovi to develop IPGs—in large part at Comcast's expense—and sensibly contracted from the outset [] to the fruits of that development effort. *See id.* It would make no sense to agree to a deal that would permit Rovi to later assert patents against the very software that Comcast and Rovi developed in collaboration and largely at Comcast's expense.

Resps. Br. at 22-26. Comcast's implied license arguments are directed toward the Legacy guide and do not mention the X1 guide. *See generally id.*, Section III(C).

Rovi argues that the software licenses do not grant implied rights because the 2010 cross license disavowed any implied rights, because the patent rights were expressly conveyed in a separate document—the patent license, and because granting “the right to ‘use’ software, without more, does not convey a patent license.” *See* Rovi Br. at 383-85.

a) Disavowal

Rovi argues:

First, the clear language of the 2010 Software License clearly disavowed any implied rights: [] JX-0052C (2010 Software License) at §2.03. As patent rights were not expressly granted, they were by definition, expressly reserved. Comcast’s “implied license” defense fails for this reason alone.

Rovi. Br. at 383. Section 2.03 follows:

[]

JX-0052C at 9 (§ 2.03).

Comcast argues:

Rovi contends that Section 2.03 of the CLA forecloses implied patent rights. That is not so. [] But Section 2.03 nowhere states that it was reserving rights necessary for Comcast to realize the rights that were expressly granted, including the right to *use* the licensed software. *Id.* (CLA § 2.01) at .000008.

Resps. Br. at 22-23. Comcast then points to the drafting history and subsequent emails to argue that

the agreement does not include an express disavowal.¹⁶² *Id.* at 23-24.

The administrative law judge has determined that § 2.03 disavows an implied license to Rovi's patents. Section 2.03 provides that all rights "to the extent not expressly granted herein, are hereby expressly reserved by RoviGuides and its Affiliates." The cross license does not expressly grant a license to Rovi's patents. Accordingly, the cross license does not provide Comcast with an implied license to practice Rovi's patents.

b) Separate Documents

Rovi argues:

Second, the very structure of the agreements defeats Comcast's claim: patent rights were expressly conveyed in the 2004 Patent License, as amended in 2010, to cover the software of the joint venture, and software rights (source code and copyright) were expressly conveyed in the Software License of 2004, as amended in 2010. . . .

Because patent rights were expressly granted by the Patent License as to the software to be developed by the joint venture, including derivative software, they could not also have been *impliedly*

¹⁶² Comcast has not explained why it is necessary to go beyond the agreement, which is an integrated document. *See* JX-0052C at 18-19 (§12.12 provides, []). *See Inv'rs Ins. Co. of Am. v. Dorinco Reinsurance Co.*, 917 F.2d 100, 104 (2d Cir. 1990) ("Parol evidence may be admitted to explain a writing only when the terms of the writing itself are ambiguous.").

conveyed by the Software License at the same time. An implied license to patent rights cannot co-exist with an express license to those same rights.

Comcast itself has recognized that the Patent License granted a (now-expired) express license as to Comcast's Legacy Products. . . . If the 2004 *Software License* conveyed those same rights, as Comcast and Mr. Marcus now suggest, then the Patent License—and the [] payment thereunder—would be redundant. . . .

Rovi Br. at 384-85. Rovi then distinguishes cases that Comcast cited “for the proposition that an implied license can coexist with an express grant[.]” *Id.* at 385. Rovi argues:

These cases stand for the mere proposition that a license to a continuation or reissue patent will implicitly include a license to the parent patent, if such a license is necessary to practice the expressly licensed continuation or reissue patents. Not one of these cases renounces black letter law that an express and implied license cannot coexist as to the same subject. *Atlas*, 895 F.2d at 754-55.

Rovi Br. at 385.

Comcast argues:

. . . the Federal Circuit has regularly found that an implied license may co-exist with an express patent license. *See, e.g., Gen. Protecht Grp., Inc. v. Leviton Mfg. Co.*, 651 F.3d 1355, 1361-62 (Fed. Cir. 2011); *see also, e.g., Intel Corp. v. Negotiated Data Solutions, Inc.*, 703 F.3d 1360, 1366-67 (Fed. Cir. 2012); *TransCore, LP v. Elec. Transaction Consultants Corp.*, 563 F.3d 1271, 1279-80 (Fed. Cir. 2009). That is particularly true where, as here, the express license and the implied license are directed to different subject matter and serve different purposes. The 2010 ALDA expanded the scope of a pre-existing and term-limited express patent license that granted Comcast *broad* rights under all of Rovi's patents for a limited term. []

Resps. Br. at 24.

The administrative law judge finds that given the side-by-side structure of the agreements, the agreements must be read together, to give meaning to the patent rights that were addressed in the 2010 Patent License, JX-0050C. The agreements are governed by New York law, which requires that agreements executed as part of the same transaction be read together. *See This Is Me, Inc. v. Taylor*, 157 F.3d 139, 143 (2d Cir. 1998); *Gordon v. Vincent Youmans, Inc.*, 358 F.2d 261, 263 (2d Cir. 1965) ("it is both good sense and good law that these closely integrated and nearly contemporaneous documents be construed together"); *Paneccasio v. Unisource Worldwide, Inc.*, 532 F.3d 101, 111 (2d Cir. 2008) ("The rules of contract construction require us to adopt an

interpretation which gives meaning to every provision of the contract.”); Restatement (Second) of Contracts § 202(2) (2008) (“all writings that are part of the same transaction are interpreted together”).¹⁶³ As explained above, the patent license permits Comcast (and authorized third parties) to “make and have made” and to “use, sell, offer for sale, lease, offer for lease, import, deploy, distribute or otherwise commercialize” products that infringe Rovi’s Patents. JX-0050C at 5 (§ 1(b)). Reading the software license to grant an implied license to Rovi’s patents would undercut the import of the patent license, which was signed on the same day as the software license.

c) Right to “Use” Software

Comcast argues:

At least since 2004, the parties addressed the JV and their respective rights to the fruits of that JV separate from any general license for Comcast to Rovi’s entire patent portfolio. The 2010 CLA implemented the parties’ 2004 agreement that, in the event one party later purchased the other’s interest, Rovi would grant Comcast a ***perpetual*** license to that software, including the right to, among other things, perpetually ***use*** the IPG software created by the JV. JX-0052C (CLA §2.01) at .000008; JX0046C (2004 License Agmt. § 2.05) at .000085. If Rovi were permitted to assert patent infringement based on the Legacy

¹⁶³ The license itself says it should be read with the corresponding documents. See JX-0052C at 18-19 []

guides now that the ALDA's broader license to Rovi's entire patent portfolio has expired, Comcast's perpetual license to use the Legacy guides would not be perpetual at all. The parties clearly did not intend that unreasonable result, as evidenced by the fact that the CLA expressly grants Comcast a right to "use" the licensed software—a right under the Patent Act. 35 U.S.C. § 271(a). Where, as here, a grantor confers "a right to 'use' . . . software," it is understood that the grant "carries with it a license to utilize the grantor's intellectual property rights as needed for such use." Mark G. Malven, *Technology Transactions: A Practical Guide to Drafting and Negotiating Commercial Agreements* 1-4 n.1 (Paul Matsumoto ed., 2015).

Resps. Br. at 25 (footnotes omitted).

Rovi argues:

Third, it is well established that the right to "use" software, without more, does not convey a patent license. Mr. Marcus proclaimed that the right to "use" Rovi's software as conveyed in the 2004 and 2010 Software Licenses constitutes an express or implied patent right. Marcus Tr. 524. Not so. The Federal Circuit has rejected such an argument. In *State Contracting & Eng'g Corp. v. Florida*, the Federal Circuit held that a grant of "all rights to use, duplicate or disclose [data], in whole or

in part, in any manner and for any purpose whatsoever, and to have or permit others to do so” did not impart a license to *patent* rights. 258 F.3d 1329, 1339, 1339-40 (Fed. Cir. 2001) (emphasis omitted); *see also Intel Corp.*, 173 F. Supp. 2d at 213 (finding no implied license where a contract bestows intellectual property other than patents).

Here, too, the word “use” in the Software Licenses falls squarely within the copyright context in which it appears. [] To show infringement under copyright law, a plaintiff must show that the defendant has “*used* her property.” *Chamberlain Group, Inc. v. Skylink Techs, Inc.*, 381 F.3d 1178, 1193, 1202 (Fed. Cir. 2004) (emphasis added). “Use,” as it appears in the Software Licenses, then, plainly refers to *copyrights*—not patent rights, which are not mentioned and were expressly granted by the Patent License.

...

Indeed, Comcast *had* patent rights that covered derivative software—for a term that has now expired. The 2004 Patent License explicitly covered the IPG software [] JX-0047C, Ex. A (Patent License) at 3, 5. If Comcast wished to continue to use derivative software insulated from infringement liability beyond the expiration of that license,

Comcast could have either renegotiated the license or created non-infringing versions of the software. Comcast was thus similarly situated to all of its competitors, all of whom developed IPG software with a term license to Rovi's patents. Each of those competitors has renewed its patent license to continue to use its licensed software; Comcast could have done the same, but has not.

Rovi Br. at 386 (emphasis in original).

In reply, Comcast argues that two cases Rovi relies on, *State Contracting & Eng'g Corp. v. Florida*, 258 F.3d 1329 (Fed. Cir. 2001) and *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336 (Fed. Cir. 2001) are distinguishable. See Resps. Reply at 10.

The administrative law judge finds that the § 2.03 does not convey a "right to use" under 35 U.S.C. § 271; § 1(b) of the patent license conveys that right. Further, Comcast has not cited any legal authority to support its argument.

Accordingly, the administrative law judge has determined that Comcast does not have an implied license to infringe Rovi's patents through the Legacy guide. Further, Comcast has not shown that it has an implied license to infringe Rovi's patents through the X1 guide, particularly as it has presented no separate argument or evidence pertaining to the X1 guide.

B. Comcast's Exhaustion Defense

"[P]atent exhaustion is an affirmative defense for which the alleged infringer has the burden of proof." *SanDisk Corp. v. Mobile Media Ideas LLC*, No. C 11-

00597 CW, 2011 WL 1990662, at *3 (N.D. Cal. May 23, 2011).

Comcast argues:

The “authorized sale of an article that substantially embodies a patent exhausts the patent holder’s rights and prevents the patent holder from invoking patent law to control postsale use of the article” because the patent holder licensed the licensee “to practice any of its patents and to sell products practicing those patents.” *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 638 (2008); *see also* *Keurig, Inc. v. Sturm Foods, Inc.*, 132 F.3d 1370, 1375 (Fed. Cir. 2013). ***In accusing the Legacy STBs of infringement***, Rovi has in substance alleged that the asserted patent claims are substantially (if not entirely) embodied in the very software that Rovi licensed to Comcast under the CLA. RX-0002C (Radloff WS) at QA 17, 25, 30, 32, 35, 37. Thus, Rovi’s grant of the perpetual software license in the CLA bars Rovi’s claims.

While Rovi has contended that patent exhaustion cannot occur without a formal transfer of title, the case on which it has relied expressly observed that the “authorized acquirers” protected by the exhaustion doctrine include “*those who acquire possession and operational control*, as by lease, from [the patentee].” *Helperich Patent Licensing, LLC v. N.Y.*

Times Co., 778 F.3d 1293, 1297 n.1 (Fed. Cir. 2015) (emphasis added) (citations omitted). Here, Comcast acquired “possession and operational control” of the Legacy guide software through the CLA and the Master Agreement, which gave Comcast unencumbered perpetual rights to use and reproduce the Guideworks software as Comcast saw fit. *See, e.g.*, JX-0053C (Master Agreement § 6.2(a)) at .000012-000013; JX-0052C (CLA §§2.01, 5.01) at .000008, .000011. Rovi cannot now invoke patent law to control postsale use of the Legacy guides. *Quanta Computer, Inc.*, 553 U.S. at 638.

Resps. Br. at 26-27 (emphasis added).

Rovi argues:

Comcast also argues that the Asserted Patents are exhausted by the Software License as to Comcast’s Legacy Products. Comcast’s exhaustion argument fails for two reasons: (1) patent exhaustion, as judicially fashioned and narrowly applied, may only be triggered by the sale of an infringing article; and (2) exhaustion does not apply to reproductions. . . .

First, patent exhaustion has historically been construed narrowly. *Helperich Patent Licensing, LLC v. New York Times Co.*, 778 F.3d 1293, 1301-07 (Fed. Cir. 2015). It is triggered only by the authorized *sale*, by the patent holder or licensee, of an article that embodies the

exhausted patent. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 636 (2008); *Helfrich*, 778 F.3d at 1297 n.1 (exhaustion protects “authorized acquirer[s],” which are “those who acquire title to the article at issue from the patentee or from a licensee authorized to sell”).

Here, Comcast’s exhaustion defense is based on a software license granting Comcast limited rights to use certain software under the 2010 Software License—not the sale of any article. Resps P.H. Br. at 57-58. Comcast has cited no authority for the proposition that the exhaustion doctrine should be expanded to apply in the context of a software license. Comcast points to *LG Elecs., Inc. v. Hitachi, Ltd.* to purportedly support its contention that a “license” can constitute a sale for exhaustion purposes, but that lone district court case, which pre-dates the Federal Circuit’s *Helfrich* opinion by six years, is not about software. *LG Electronics* stands for the unremarkable proposition that a *patent* license may authorize foreign sales of patented articles to which exhaustion would then attach. 655 F. Supp. 2d 1036, 1044 (N.D. Cal. 2009).

Comcast also asserts that the perpetual rights to the software are “unencumbered” and therefore exhaust Rovi’s patent rights. But this is merely a

repackaging of Comcast's implied rights argument. *See* Section XI(A)(3), *supra*. The 2010 Software License is not a patent license—it conveyed no patent rights. Patent rights as to joint venture software (including in the event of dissolution) were conveyed by the contemporaneous but separate Patent License, which expired on March 31, 2016. JX-0047C, Ex. A (Patent License) at 3, 5.

Second, and equally important, exhaustion attaches only to the particular patent-authorized article that was sold, and not to any reproduction thereof. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013). “That is because, once again, if simple copying were a protected use, a patent would plummet in value after the first sale of the item containing the invention. The undiluted patent monopoly, it might be said, would extend not for 20 years (as the Patent Act promises), but only for one transaction.” *Id.* at 1768. Thus, *even if* title to a copy of the Rovi Software passed to Comcast in 2010 (no such event occurred), exhaustion would potentially attach *to that particular copy only*, such that Comcast would be free to dispose of only that particular copy. Comcast's argument that a right to reproduce software intrinsically includes the right to practice patents long after such a license has expired is unsupported.

Under controlling Supreme Court precedent, exhaustion does not reach copies of Comcast's Legacy Guide resident on the set-top boxes provided to its subscribers—the focus of Rovi's infringement allegations for the patents that implicate Legacy Products. *Id.*

Rovi Br. at 387-89.

Neither party presents a reply. *See generally* Rovi Reply, Section XI Resps. Reply, Section III.

The administrative law judge has determined that Comcast has not shown its acquisition of “possession and operational control’ of the Legacy guide software through the CLA and the Master Agreement” constitutes a sale for purposes of patent exhaustion.¹⁶⁴ As Rovi correctly notes, the 2010 software license was encumbered, as Rovi reserved ownership and control of its patent rights (which were simultaneously licensed for a fixed term). Further, even if the software cross license is considered an authorized sale of an article, that sale does not give Comcast infinite rights to reproduce the Legacy guide. *See Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013). Finally, for the avoidance of doubt, the administrative law judge notes that Comcast has not shown exhaustion pertains to the X1 guide.

Accordingly, the administrative law judge has determined that Comcast's exhaustion defense fails.

¹⁶⁴ Comcast does not address § 2.04 (“Authorized Sales”) of the Software License. *See* JX-0052C at 9 (identifying limits on authorized sales).

C. ARRIS's Forum Selection, Estoppel and Waiver Defenses

[]

1. Overview of License (JX-0068C)

[]

At the hearing, witnesses from both parties also testified that the contract was not ambiguous. Mr. Armaly, Rovi's Executive Vice President of Intellectual Property and Licensing, testified, as follows:

Q. . . . You're a lawyer, aren't you, by training?

A. I am.

Q. And you're aware of the parol evidence rule?

A. I'm generally aware of it.

Q. You probably learned about that in law school. Do you think this agreement is ambiguous?

A. I don't think it's ambiguous.

Q. So Rovi's position is this agreement is not ambiguous, it's clear?

A. Correct.

Q. And that's your position too?

A. That's my position.

Tr. 140-141. Mr. Van Aacken, ARRIS's VP and lead counsel for ARRIS group, testified, as follows:

Q. In your witness statement, you testified about a certain license

agreement between Rovi and ARRIS;
right?

A. I did.

Q. Now, let me just ask you this first. Is
that agreement ambiguous in any way?

A. Not to me.

Tr. 490.

ARRIS's witnesses confirmed that the set-top boxes
in this investigation do not carry ARRIS IPGs. Mr.
Van Aacken also testified about the products it sells to
Comcast, as follows:

Q. Now, I want to be clear up front about
your arguments about this agreement.
ARRIS doesn't argue that it has an
express license that covers the accused
products in this investigation on account
of that license, does it?

A. We do not argue that the license
covers the products we sell to Comcast.

Q. And that's because you just heard
testimony — or maybe you didn't hear,
but your colleague just testified that the
accused set-top boxes do not have any
IPGs that are ARRIS IPGs; is that right?

A. That's right. The boxes don't have any
IPGs on them.

Tr. 490-491. Robert Folk, Vice President of Product
Management for ARRIS, testified, as follows:

Q. I just want to be clear about the
ARRIS software. The ARRIS software

that's loaded onto the device is not an ARRIS interactive program guide, is it?

A. No.

Tr. 486.

2. Enforcement Action and Forum Selection

ARRIS argues that the investigation should be terminated with respect to ARRIS because the [] limits the forum for any proceedings arising out of or otherwise related to the parties' agreement to courts within the state and city of New York." Resps. Br. at 27.

With regard to the enforcement action, ARRIS argues:

[]

This action was filed as a direct result of the failed licensing discussions between Comcast and Rovi. *See* Amended Complaint, at ¶ 2. As Mr. Armaly testified, Rovi had sought to negotiate directly with Comcast regarding Rovi's IPG patents for over two years. CX-0001C at Q/A 118. Those negotiations failed, and upon expiration of Comcast's prior license agreement, Rovi filed this action—and other actions in U.S. district court—against Comcast and ARRIS. *See, e.g.* Amended Complaint, at ¶2; RX-0698 at 4. This action concerns six of the Rovi IPG patents that were discussed by Rovi and Comcast during their negotiations (see CX-0001C at Q/A 118-132), each of

which is subject to the ARRIS-Rovi Agmt. *See* Amended Complaint, at ¶ 5.

Resps. Br. at 33. ARRIS relies upon “the plain language of [19 U.S.C. § 1337(c)], Supreme Court precedent, the deference given by the courts, and the *Semiconductor Chips* investigation,” to argue that the forum selection clause “has the same impact as an arbitration clause under Section 337(c).” *Id.* at 28-30.

Rovi argues:

The ARRIS IPG License, however, has nothing to do with Rovi’s claims against the Accused Products here, which are ARRIS set-top boxes designed for *Comcast* IPGs. Both ARRIS corporate witnesses testified that the Accused Products do not involve IPGs developed by or for ARRIS and are therefore not licensed by the ARRIS IPG License. Folk Tr. 486, Van Aacken Tr. 490.

Rovi Br. at 389. Rovi also argues that ARRIS’s arguments about the forum selection clause are breach-of-contract claims, and that those claims should be adjudicated in New York. *Id.* at 391-93.

ARRIS replies that in the ARRIS-Rovi IPG License, [] Resps. Reply at 11.

The administrative law judge has determined that the ARRIS-Rovi IPG License does not preclude this investigation with respect to ARRIS, as ARRIS urges. The ARRIS-Rovi IPG License’s grant is limited to [] IPGs. JX-0068C at 1, 5 (RECITALS; ¶2.1). [] Comcast’s X1 and Legacy guides are not [] IPGs, and the ARRIS-Rovi IPG License says nothing about ARRIS’s ability to sell hardware to Comcast.

Accordingly, even if the investigation constitutes an [] under the ARRIS-Rovi IPG License, the dispute does not arise out of, or relate to, the ARRIS-Rovi IPG License, because the License pertains to [] IPGs, not the hardware ARRIS sold to Comcast.

In addition, with respect to ARRIS's argument that termination is appropriate under § 337(c) because its forum selection clause is equivalent to a settlement agreement or an arbitration clause, the administrative law judge finds that ARRIS has not shown that termination is warranted. In effect, ARRIS argues that the Commission cannot investigate unfair trade practices and their effect on domestic industries based on an agreement between private parties. ARRIS, however, has not addressed its failure to obtain an injunction barring the action in light of the forum selection clause. As mentioned in Order No. 31, the Commission has terminated investigations under Commission Rule 210.21 after a complainant moved to terminate the investigation and withdraw the complaint in light of a district court's injunction barring the Commission action due to a forum selection clause. *See, e.g., Certain Network Commc'ns Sys. For Optical Networks and Components Thereof*, Inv. No. 337-TA-535, Initial Determination (Order No. 6) (June 7, 2005); *Certain Ground Fault Circuit Interrupters and Prods. Containing Same*, Inv. No. 337-TA-739, Initial Determination (Order 19) (Jan. 19, 2011).

ARRIS's arguments are breach-of-contract claims, which are not a defense the Commission's statutory directive to investigate unfair trade practices (or to patent infringement).¹⁶⁵ *See* 19 U.S.C. § 1337(c);

¹⁶⁵ During the Hearing, ARRIS characterized its claims as a

General Protecht Group, Inc. v. Leviton Mfg. Co., 651 F.3d 1355, 1359 (Fed. Cir. 2011). Whether or not Rovi has, in fact, breached the ARRIS-Rovi IPG License by filing a complaint with the Commission is for the New York court to determine and to remedy, if needed.

Accordingly, the administrative law judge finds that ARRIS has not shown that termination is warranted.

3. Implied License

For implied license, ARRIS argues:

. . . Rovi’s promises in the ARRIS-Rovi Agmt. give rise to at least an implied license to ARRIS that operates as a defense to Rovi’s infringement claims against ARRIS in this Investigation. JX-0068C at 7729-30; RX-0782C at Q/A 17; Tr. 499:2-12; *see General Protecht*, 651 F.3d at 1359-60. [] This promise by Rovi amounts to an implied license to ARRIS of equal scope. *See, Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 878 (Fed. Cir. 1995) (noting that a license, “which may be express or implied,” is “in essence nothing more than a promise by the licensor not to sue the licensee”).

breach of contract. *See* Tr. 79 (“And the two promises — the two promises that are in that private party agreement. []. The second promise was that if there were disputes arising under our agreement with Rovi, they were to be resolved in New York by New York courts, not in the ITC. ***That promise was breached too***, and we think the remedy is dismissal of Arris.” (emphasis added)).

Indeed, the closing sentence of []— confirms that such an implied license to ARRIS arose from Rovi’s promise, in contrast to any such implied license passing through to the [] JX-0068C at 7729-30 (emphasis added); see Tr. 497:18-498:7, 499:2-500:1. Rovi’s interpretation of this sentence, on the other hand, so as to carve out any implied license to ARRIS itself, cannot be reconciled with the plain language of the parties’ agreement in the earlier sentence of [] JX-0068C at 7729; see *TransCore, LP v. Elec. Transaction Consultants Corp.*, 563 F.3d 1271, 1278-79 (Fed. Cir. 2009) (finding an implied license to continuation patents arose from a settlement agreement despite statements therein that “[n]o express or implied license” was being granted in the release and that the “Covenant Not To Sue shall not apply to any other patents . . . to be issued in the future”).

...

Independent of Section 337(c), should the ALJ find that one or more of the asserted claims is infringed by ARRIS, ARRIS’s affirmative defenses preclude the entry of any limited exclusion order against ARRIS for similar reasons as set forth above. For example, as discussed above, Rovi’s promises in the ARRIS-Rovi Agmt. give rise to an implied license to ARRIS, which operates as a defense to Rovi’s infringement claims against

ARRIS in this Investigation. JX-0068C at 7729-30; RX-0782C at Q/A 17; *see* Tr. 499:2-12; *see General Protecht*, 651 F.3d at 1359-60; *see also Carborundum*, 72 F.3d at 878.

Resps. Br. at 39-40, 44-45.

The license contains numerous clauses curtailing the scope of the license and any unintended grant of rights. Paragraph 2.4 provides:

[]

JX-0068C at 6. [] Accordingly, the administrative law judge has determined that the ARRIS-Rovi IPG License does not give ARRIS an implied license “that operates as a defense to Rovi’s infringement claims against ARRIS,” as ARRIS argues.

4. Equitable Estoppel

For equitable estoppel, ARRIS’s entire argument is:

Rovi’s infringement claims are likewise barred by the doctrine of equitable estoppel. *Radio Sys. Corp. v. Lalor*, 709 F.3d 1124, 1130 (Fed. Cir, 2013) (listing required elements for equitable estoppel). Through Sections 2.2 and 2.3 of the ARRIS-Rovi Agmt., and Rovi’s statements and conduct in the related negotiations, Rovi led ARRIS to reasonably infer that Rovi did not intend to enforce its patent rights against ARRIS so long as ARRIS [] JX-0068C at 7729-30; RX-0782C at Q/A 17. ARRIS relied on Rovi’s promises, statements, and conduct in thereafter continuing to

supply Comcast with set-top box products for use in Comcast's network and services. Additionally, ARRIS is [not seeking to indemnify Comcast against any claim by Rovi] in this Investigation. *See, e.g.*, RX-0782C at Q/A 31-32. ARRIS will be materially prejudiced if Rovi's infringement claims are permitted.

Resps. Br. at 45.

Rovi replies:

As Rovi has explained, Compls. Br. at 389-91, ARRIS has no reasonable affirmative defense that arises out of the ARRIS IPG License, a limited patent license that covers only particular, software—"IPGs developed by or for ARRIS." The parties have long agreed—and affirmed in several rounds of briefing in New York state court, in the Eastern District of Texas, before the Commission, and in live testimony—that the Accused Products in this Investigation are not "IPGs developed by or for ARRIS." *Id.* ARRIS insists, however, that the ARRIS IPG License must extend to hardware provided to Comcast—accused set-top boxes that have nothing to do with ARRIS IPGs—under doctrines of implied license, equitable estoppel, or waiver. Resps. Br. 45. Having spent only a few lines per theory, ARRIS can hardly contend that it meets its burden to establish any one of these alleged defenses by a

preponderance of the evidence. *Jazz Photo Corp. v. Int’l Trade v. Comm’n*, 264 F.3d 1094, 1102 (Fed. Cir. 2001).

Rovi Reply at 142.

Radio Systems Corporation v. Lalor provides:

three elements are required for equitable estoppel to bar a patentee’s suit: (1) the patentee, through misleading conduct (or silence), leads the alleged infringer to reasonably infer that the patentee does not intend to enforce its patent against the alleged infringer; (2) the alleged infringer relies on that conduct; and (3) the alleged infringer will be materially prejudiced if the patentee is allowed to proceed with its claim.

709 F.3d 1124, 1130 (Fed. Cir. 2013).

The administrative law judge has determined that ARRIS has not shown that equitable estoppel applies. Paragraph 2.4 of the ARRIS-Rovi IPG License explicitly curtails estoppel, and paragraphs 2.2 and 2.3 curtail any covenant-not-to-assert or “any similar right” to ARRIS. Further, ARRIS has not cited any evidence of material prejudice. *See generally* Resps. Br., Section IV. Accordingly, equitable estoppel does not apply.

5. Waiver

For waiver, ARRIS’s entire argument is:

Waiver similarly applies. Rovi intentionally relinquished the right to involve ARRIS in an [] against Comcast so long as [] JX-0068C at

7729-30; see *U.S. v. Olano*, 507 U.S. 725, 733 (1993) (“[W]aiver is the ‘intentional relinquishment or abandonment of a known right.’”).

Resps. Br. at 45.

Rovi replies:

As Rovi has explained, Compls. Br. at 389-91, ARRIS has no reasonable affirmative defense that arises out of the ARRIS IPG License, a limited patent license that covers only particular software—“IPGs developed by or for ARRIS.” The parties have long agreed—and affirmed in several rounds of briefing in New York state court, in the Eastern District of Texas, before the Commission, and in live testimony—that the Accused Products in this Investigation are not “IPGs developed by or for ARRIS.” *Id.* ARRIS insists, however, that the ARRIS IPG License must extend to hardware provided to Comcast—accused set-top boxes that have nothing to do with ARRIS IPGs—under doctrines of implied license, equitable estoppel, or waiver. Resps. Br. 45. Having spent only a few lines per theory, ARRIS can hardly contend that it meets its burden to establish any one of these alleged defenses by a preponderance of the evidence. *Jazz Photo Corp. v. Int’l Trade Comm’n*, 264 F.3d 1094, 1102 (Fed. Cir. 2001).

Rovi Reply at 142.

ARRIS's entire argument for a case-dispositive issue is 30 words. It cites no evidence beyond the text of the ARRIS-Rovi IPG License, and the only case it cites addressed waiver in the context of "whether the presence of alternate jurors during jury deliberations was a 'plain error' that the Court of Appeals was authorized to correct under Federal Rule of Criminal Procedure 52(b)." *United States v. Olano*, 507 U.S. 725, 727 (1993).

Paragraph 2.4 of the ARRIS-Rovi IPG License explicitly [] JX-0068C at 6. Further, ARRIS has not shown that any relinquishment was intentional, as the ARRIS-Rovi IPG License states that [] Accordingly, waiver does not apply.

6. Issue Preclusion

Rovi contends ARRIS's contract arguments are barred by issue preclusion.¹⁶⁶ Rovi argues:

The ITC and the Federal Circuit have long recognized that "those who have contested an issue shall be bound by the result of the contest, and that matters once tried shall be considered forever settled as between the parties." *Young Eng'rs, Inc. v. Int'l Trade Comm'n*, 721 F.2d 1305, 1315 (Fed. Cir. 1983). Issue preclusion requires that an identical issue was actually litigated and decided in a prior action, the party against whom estoppel is invoked had a full and fair opportunity to litigate the issue, and the

¹⁶⁶ The prior decision is: *Rovi Guides, Inc. v. Comcast Corp.*, No. 2:16-CV-00322-JRG-RSP (Dkt. 182), 2016 WL 6217201, (E.D. Tex. Oct. 25, 2016).

resolution of the issue was essential to a final judgment. *Certain Integrated Circuits, Chipsets, & Prods. Containing Same*, Inv. No. 337-TA-786, Initial Determination, 2012 ITC LEXIS 1891, at *110-11 (July 12, 2012) (quoting *Innovad Inc. v. Microsoft Corp.*, 260 F.3d 1326, 1334 (Fed. Cir. 2001)). A finding as to the enforcement of a forum selection clause upon a motion to transfer is a “final judgment” for purposes of issue preclusion. *Morgan Tire of Sacramento v. Goodyear Tire*, No. 2:15-cv-00133-KJM-AC, 2015 U.S. Dist. LEXIS 51778, *15-16 (E.D. Cal. Apr. 20, 2015). A party who has litigated a forum selection clause against an opposing party in one forum may not then litigate the same clause against the same party in another forum. *Surgical Orthomedics, Inc. v. Brown Rudnick LLP*, No. 12-6652, 2013 U.S. Dist. LEXIS 87418, at *4-7 (D.N.J. June 21, 2013).

Rovi Br. at 390. Rovi further argues that although the Eastern District of Texas “transferred the action for judicial economy reasons, this determination is ‘essential’ to the judgment for purposes of issue preclusion.” *Id.* at 391.

ARRIS argues:

. . . Judge Payne plainly did not decide the issue of termination of this Investigation under Section 337(c) in view of the ARRIS-Rovi Agmt., let alone in a final judgment. Moreover, and most

tellingly, Magistrate Judge Payne’s remarks regarding the ARRIS-Rovi Agmt. were not “essential” to his decision—the **granting** of ARRIS’s motion.

. . . Moreover, the lynchpin in Judge Payne’s remarks—“breach of contract is not a defense to patent infringement”—**ignores** ARRIS’s affirmative defenses in this Investigation, which are recognized defenses to patent infringement. *See Anton/Bauer, Inc. v. PAG, Ltd.*, 329 F.3d 1343, 1350 (Fed. Cir. 2003) (“An implied license is a defense to patent infringement.”). As set forth above and below, ARRIS’s affirmative defenses in this Investigation are based on the [] clauses of the ARRIS-Rovi Agmt., and thereby raise “a non-frivolous dispute regarding the scope of a patent license,” triggering the broad forum selection clause of the ARRIS-Rovi Agmt. *General Protecht*, 651 F.3d at 1359.

Resps. Br. at 43-44.

In *Innovad Inc. v. Microsoft Corp.*, the Federal Circuit explained

Under the doctrine of issue preclusion, also called collateral estoppel, a judgment on the merits in a first suit precludes relitigation in a second suit of issues actually litigated and determined in the first suit. *In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994) (citing *Lawlor v. Nat’l Screen Serv. Corp.*, 349

U.S. 322, 326 (1955)). Issue preclusion operates only if: (1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the first action; and (4) the party against whom estoppel is invoked had a full and fair opportunity to litigate the issue in the first action.

260 F.3d 1326, 1334 (Fed. Cir. 2001).

The administrative law judge has determined that Rovi has not shown that issue preclusion applies. As the parties note, issue preclusion requires the “identical issue” to be litigated. The Eastern District of Texas granted ARRIS’s motion to change venue pursuant to a forum selection clause. Here, ARRIS seeks to terminate the investigation altogether, under 19 U.S.C. § 1337(c), as if the forum selection clause is equivalent to a settlement agreement or arbitration clause. As discussed above, terminating an investigation under § 337(c) differs from transferring venue pursuant to a forum selection clause. Accordingly, issue preclusion does not apply.

VI. DOMESTIC INDUSTRY – ECONOMIC PRONG

As argued with regard to the technical prong, Rovi has identified the following domestic industry products: Rovi i-Guide, Rovi Passport, Rovi TotalGuide xD system, Verizon FiOS system, and SuddenLink. Rovi generally does not contend the Verizon system (apart from licensing, for instance) constitutes a portion of its domestic industry. *See* Rovi Br. at 334-36.

A. Rovi's Investment in Plant and Equipment

Rovi contends it has invested [] in information-technology ("IT") and facilities related to its Passport product "which included hardware, software, and associated infrastructure investments, all necessary to develop Passport." CX-0007C (Putnam WS) at Q/A 88-89; CX 1456C (DI Product Financials); CX-0006C (Bright WS) at Q/A 53-57. Rovi also contends it invested [] in IT and facilities related to i-Guide and [] for TotalGuide xD. *See* CX-0007C (Putnam WS) at Q/A 90-93; CX-1456C (DI Product Financials); CX-0006C (Bright WS) at Q/A 53-57.

Comcast argues that Rovi's investments do not count "under Prong A because they relate to R&D or sales and marketing." Resps. Br. at 361. Comcast argues:

For iGuide, of the [] relate to R&D, [] relate to sales, and [] relate to marketing. *See* RDX-1501C (citing RPX-0004C). For Passport, of the [] relate to R&D, [] relate to sales, and [] relate to marketing. *See id.* For TotalGuide xD, of the [] relate to R&D and [] relate to sales. *See id.*

Id. at n.97.

Rovi responds that R&D expenses have been used to satisfy prong A:

[T]he Commission has long found it appropriate to independently account for the same domestic industry investment under separate domestic industry categories. *See, e.g., Certain Table Saws Incorporating Active Injury Mitigation*

Tech. & Components Thereof, Inv. No. 337-TA-965, Initial Determination, at 16-17 (Mar. 22, 2016) (unreviewed) (including the complainant's R&D facility and unspecified "office space" in a 337(a)(3)(A) analysis and "R&D," "engineering," and "technical service" as relevant labor expenses under 337(a)(3)(B)); *Certain Modified Vaccina Ankara ("MVA") Viruses and Vaccines and Pharmaceutical Compositions Based Thereon*, Inv. No. 337-TA-550, Initial Determination, at 95-96 (Sept. 6, 2006) (unreviewed) (complainant's lease of "research facility" significant under 337(a)(3)(A)); *Certain Multiple Mode Outdoor Grills and Parts Thereof*, Inv. No. 337-TA-895, Initial Determination, at 89-91 (Sept. 26, 2014) (unreviewed in relevant part) (finding satisfaction of subsection (B) based in part on labor relating to engineering and R&D).

Rovi Reply at 126-27.

Rovi has nine U.S. facilities that support sales, marketing, technical support activities, product development, and activities related to the DI Products. CX-0007C (Putnam WS) at Q/A 95-98; JX-0039 (Rovi 2015 10-K); CX-0006C (Bright WS) at Q/A 23, 29 32. Rovi's Burbank, California office provides significant support for Passport; Rovi's Golden, Colorado office is primarily associated with the development and support of i-Guide; Rovi's Tulsa, Oklahoma office is associated with support for all of Rovi's DI Products (including post-sales activities such as customer support); and Rovi's Wayne, Pennsylvania office

employs multiple management and administrative employees who contribute to the development and management of Rovi's DI Products. *See* CX-0007C (Putnam WS) at Q/A 99-100; CX-0006C (Bright WS) at Q/A 29-32; CX-1455C (Condensed Guide - Patent Category List). Dr. Putnam also opined that Rovi's investments are significant. CX-0007C (Putnam WS) at Q/A 108-10, 113-14.

The administrative law judge finds that Rovi's R&D expenses, along with its IT and facility expenses, are a significant investment in plant and equipment. *See* CX-0007C (Putnam WS) at Q/A 88-93; CX-1456C (DI Product Financials); CX-0006C (Bright WS) at Q/A 53-57. Further, even if R&D expenses are excluded, Rovi has still shown that its facilities in Burbank, California, Golden, Colorado, Tulsa, Oklahoma, and Wayne, Pennsylvania are a significant investment in plant and equipment.

Accordingly, the administrative law judge has determined that the evidence shows Rovi satisfies the economic prong of the domestic industry requirement under § 337(a)(3)(A).

B. Rovi's Employment of Labor or Capital

1. Labor

Rovi argues:

. . . Each year from 2012 to 2015, an average of the full-time equivalent of [] U.S. Rovi employees worked on Passport and an average of the full-time equivalent of [] U.S. Rovi employees worked on i-Guide; in 2014, the full-time equivalent of [] U.S. Rovi employees worked on TotalGuide xD; and in 2015,

the full-time equivalent of [] U.S. Rovi employees worked on TotalGuide xD. CX-0007C (Putnam WS) at Q/A 118-20; CX-0006C (Bright WS) at Q/A 58.

. . . from 2012 to 2015, Rovi spent more than [] on labor associated with Passport, and more than [] on labor associated with i-Guide, all in the U.S. CX-0007C (Putnam WS) at Q/A 121-24, Table 4; CX-1456C (DI Product Financials); CX-0006C (Bright WS) at Q/A 59-61. And from 2014 to 2015, Rovi spent more than [] associated with TotalGuide xD on U.S. labor. CX-0007C (Putnam WS) at Q/A 121-22, 125; CX-0006C (Bright WS) at Q/A 59-61. Each of these expenditures includes R&D, engineering, and tech support; sales and marketing (licensing); and costs of goods sold; including compensation, benefits, and commissions. CX-0007C (Putnam WS) at Q/A 121-22; CX-1456C (DI Product Financials); CX-0006C (Bright WS) at Q/A 60-61.

Rovi Br. at 339-40.

Comcast argues:

- that Rovi's data are unreliable and that Rovi engineers have testified that there are only [] employees who work on i-Guide, [] employees who work on Passport, and only [] in the U.S. that works on TotalGuide xD (Resps. Br. at 364);

- that Rovi failed to allocate its labor costs to the protected articles, because Dr. Putnam “failed to tie any labor costs for IPGs to any particular article that satisfies the technical prong” (Resps. Br. at 365);
- that Rovi’s data improperly includes R&D and sales and marketing expenses (this is the same argument made with respect to prong A, above) (Resps. Br. at 365)
- that Rovi’s labor costs are unreliable, because Rovi’s witnesses could not explain what activities employees whose expenses were reported actually performed (Resps. Br. at 366); and
- that Rovi’s labor expenses are not significant in relation to Rovi’s overall expenses (Resps. Br. at 367).

Rovi replies that the law does not require proof that its employees engage in specific activities. Rovi Reply at 127-28 (“Such proof is not required—Rovi presented its domestic industry expenses as they are kept in Rovi’s ordinary course of business, which is all that the Commission requires.”).

The administrative law judge finds that Rovi’s R&D, engineering, and tech support expenses are a significant investment in labor. *See* CX-0007C (Putnam WS) at Q/A 121-36 (Rovi has spent over [] on labor related to Passport; over [] on labor related to i-Guide; over [] on labor related to TotalGuide xD); *see also* Resps. Br. at 366 n.100 (reporting for “iGuide, of the [] relate to R&D and [] relate to Sales & Marketing. For Passport, of the [] relate to R&D and [] relate to Sales & Marketing. For

TotalGuide xD, of the [] relate to R&D and [] relate to Sales & Marketing. *See* RDX-1502C at 2-3). The cost of goods sold (“COGS”) data are unreliable, as no Rovi witness could explain how they relate to this investigation. Tr. 407-410. The magnitude of these expenditures alone is sufficient to constitute a significant employment of labor under § 337 (a)(3)(B). *See Lelo Inc. v. Int’l Trade Comm’n*, 786 F.3d 879, 883 (Fed. Cir. 2015) (“the terms ‘significant’ and ‘substantial’ refer to an increase in quantity, or to a benchmark in numbers”).

Accordingly, the administrative law judge has determined that the evidence shows Rovi satisfies the economic prong of the domestic industry requirement under § 337(a)(3)(B).

2. Capital

Rovi argues:

. . . U.S. capital expenditures allocated to the DI Products totaled approximately [] from 2012-2015. CX-0007C (Putnam WS) at Q/A 138-39. Of this total, [] is allocated to Passport, [] is allocated to i-Guide, and [] is allocated to TotalGuide xD. *Id.* at Q/A 139, Table 5; CX-0006C (Bright WS) at Q/A 52-57; CX-1456C (DI Product Financials). Rovi’s capital expenditures with respect to Passport, and with respect to i-Guide, are each significant in relation to Rovi’s overall capital expenditures and relative to each product. CX-0007C (Putnam WS) at Q/A 140-41. Rovi’s capital expenditures with respect to Total Guide

xD, limited to 2014-15, are likewise significant. *Id.* at Q/A 142.

Rovi Br. at 341-42.

Comcast argues:

No evidence shows Rovi made capital expenditures with respect to its IPGs. Dr. Putnam claims [Rovi spent [] (2013), and [] (2014) on capital expenditures and that Rovi anticipates spending [] more in 2016. CX-0007C at Q/A 137. These figures are total companywide capital expenditures from Rovi's annual reports. *See* JX-0036 (Rovi 2012 Form 10-K) at JX-0036.000048, JX-0037 (Rovi 2013 Form 10-K) at JX-0037.000046, and JX-0038 (Rovi 2014 Form 10-K) at JX-0038.000049. But these investments are not limited to the U.S. RX-0852C (Schoettelkotte WS) at Q/A 64. Nor are they investments in protected articles. *Id.* These capital expenditures do not even represent investments in Rovi's IPGs. *Id.* Therefore, these investments are of little relevance, especially given that ***Rovi does not even rely on these investments.***

Resps. Br. at 367-68 (emphasis in original).

The administrative law judge finds that Rovi has shown its claimed capital expenditures were made with respect to its IPGs and that the investment was made in the United States, as shown in Dr. Putnam's testimony:

139. Q: And, in particular, what were Rovi's capital expenditures made in relation the Domestic Industry Products?

A: Rovi allocates its expenditures on facilities and information technology ("overhead") to the Domestic Industry Products, based on an annual review of its expenditures. Using that method, Rovi spent about [] million from 2012-2015 on the Domestic Industry Products, as shown in Table 5.

[]

CX-0007C (Putnam WS) at Q/A 139-44. In particular, the [] expense for Passport products and the [] expense for i-Guide products are each individually significant for a company of Rovi's size, and the sum for all three products is also significant for a company of Rovi's size. *See* JX-0039 at 37 (reporting annual revenues of approximately \$500M for 2011, 2012, 2013, 2014, and 2015).

Accordingly, administrative law judge has determined that the capital expenses cited are significant under § 337(a)(3)(B).

C. Rovi's Investment in Exploitation of the Patents, Based on Engineering, Research and Development

Rovi argues:

. . . Rovi tracks its expenses by "cost centers" associated with R&D and engineering activities, and regularly performs a "Product P&L" process to

allocate these expenses to certain products. See CX-0006C (Bright WS) at Q/A 16-17; Bright Tr. 379, 385. Based on these ordinary course allocations, since 2012 Rovi has invested at least approximately [] on U.S. R&D activities related to Passport (approximately [] annually), and approximately [] on U.S. R&D activities related to i-Guide (approximately [] annually). . . . And since 2014, Rovi has invested at least approximately [] on U.S. R&D activities related to TotalGuide xD (approximately [] annually).

Rovi Br. at 343.

Rovi reports its U.S. R&D expenses for the DI products for 2015, as follows:

[]

Rovi Br. at 344.

Comcast argues:

- Rovi did not allocate its investments to protected articles (Resps. Br. at 368);
- Rovi's expenditures are unreliable, because no Rovi witness could explain the activities performed in its R&D cost centers (Resps. Br. at 369-70);
- Rovi has not established a nexus between its R&D and the asserted patents, because its expenses are tied to its IPGs, not the patented features of those products (Resps. Br. at 370); and

- Rovi's expenses are not substantial in context, because "Rovi's declining IPG business and its shifting of investments from those products undermine any suggestion that Rovi's R&D investments for its IPG products are 'substantial.'" (Resps. Br. at 370-73).

The Commission does not adhere to a rigid formula in determining the scope of the domestic industry. *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm'n Op. at 27 (Feb. 17, 2011) (citing *Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Comm'n Op. at 39 (Aug. 1, 2007) ("*Male Prophylactics*"). The Commission explained that the domestic industry "determination entails 'an examination of the facts in each investigation, the article of commerce, and the realities of the marketplace.' . . . The determination takes into account the nature of the investment and/or employment activities, 'the industry in question, and the complainant's relative size.'" *Id.* (quoting *Male Prophylactics* and *Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 26 (May 16, 2008)).

The administrative law judge finds that Rovi has shown that its investment in research and development is substantial. For example, since 2012, Rovi has spent about [] million on R&D related to Passport and about [] million on R&D related to i-Guide. Since 2014, Rovi has spent [] million on R&D related to Total Guide xD. *See* CX-0007C (Putnam WS) at Q/A 150-53. These expenses have supported [] jobs. *Id.* at Q/A 155-57; CX-1456C (DI Product Financials). Further, Rovi has shown that its expenditures relate to its IPGs, which practice certain of the asserted patents, as discussed above.

Accordingly, the administrative law judge has determined that the evidence shows Rovi satisfies the economic prong of the domestic industry requirement under § 337(a)(3)(C) based on its substantial investment in engineering and research and development.

D. Rovi's Investment in Exploitation of the Patents, Based on Licensing

When a complainant relies on licensing to demonstrate the existence of a domestic industry pursuant to section 337(a)(3)(C) based on licensing, the Commission has explained the showing required of the complainant, as follows:

Complainants who seek to satisfy the domestic industry requirement by their investments in patent licensing must establish that their asserted investment activities satisfy three requirements of section 337(a)(3)(C). First, the statute requires that the investment in licensing relate to "its exploitation," meaning an investment in the exploitation of the asserted patent. 19 U.S.C. § 1337(a)(3)(C) Second, the statute requires that the investment relate to "licensing." 19 U.S.C. § 1337(a)(3)(C) Third, any alleged investment must be domestic, *i.e.*, it must occur in the United States. 19 U.S.C. § 1337(a)(2), (a)(3). Investments meeting these requirements merit consideration in our evaluation of whether a complainant has satisfied the domestic industry requirement. Only after determining the

extent to which the complainant's investments fall within these statutory parameters can we evaluate whether complainant's qualifying investments are "substantial," as required by the statute. 19 U.S.C. § 1337(a)(3)(C). If a complainant's activity is only partially related to licensing the asserted patent in the United States, the Commission examines the strength of the nexus between the activity and licensing the asserted patent in the United States.

Navigation Devices, Inv. No. 337-TA-694, Corrected Comm'n Op. at 7-8 (Aug. 8, 2011). One "potentially important consideration is whether the licensee's efforts relate to 'an article protected by' the asserted patent under section 337(a)(2)-(3)." *Id.* at 10. In addition, the Commission has explained it

may also consider other factors including, but not limited to, (1) the number of patents in the portfolio, (2) the relative value contributed by the asserted patent to the portfolio, (3) the prominence of the asserted patent in licensing discussions, negotiations and any resulting license agreement, and (4) the scope of the technology covered by the portfolio compared to the scope of the asserted patent.

Id. In assessing an asserted patent's value within a portfolio, the Commission looks for evidence that

(1) it was discussed during the licensing negotiation process, (2) it has been successfully litigated before by

complainant, (3) it relates to a technology industry standard, (4) it is a base or pioneering patent, (5) it is infringed or practiced in the United States, or (6) the market recognizes its value in some other way.

Id. at 10-11.

1. Licensing Investment

Assuming that the nexus requirement has been met, the administrative law judge finds that Rovi has invested in licensing the guidance portfolio through labor costs in the U.S. for its licensing team and for overhead expenditures for these employees.

Rovi explains that it has calculated its investment in three ways: the “ordinary course,” which involves data from Kevin Bright, Rovi’s Senior Director of Financial Planning & Analysis, the “Armaly allocation,” and the “Putnam expert analysis.” Rovi Br. at 350-53. Rovi reports its expenses, as follows:

	1. Bright Data	2. Armaly Allocation	3. Putnam Allocation
Time Frame	2011-2Q2016	2015-2Q2016	2012-2015
Total \$	[
Avg \$]

See id. at 353.

Comcast argues that Rovi’s “claimed licensing expenditures have changed dramatically, resulting in readily apparent inconsistencies, and are therefore

unreliable and cannot establish a DI.” Resps. Br. at 375.

a) Bright Data

Rovi argues:

First, Kevin Bright, Rovi’s Senior Director of Financial Planning & Analysis, testified that Rovi’s patent licensing expenses are kept in the ordinary course of Rovi’s business. CX-0006C (Bright WS) at Q/A 17, 18, 31, 53. While Comcast and its expert dispute whether it was appropriate for Rovi to count litigation and patent prosecution expenses in its licensing expenses, *see* RX-0852C (Schoettelkotte RWS) at Q/A 153, such activities are part and parcel of Rovi’s patent licensing business, and Rovi counts them as licensing expenses in the ordinary course of Rovi’s business. *See* Bright Tr. 393. The Commission has repeatedly found that such expenses may be appropriately counted under prong (C) when, as here, they are paired with other licensing-related investments and activities. . . .

According to Mr. Bright, from 2011 through 2Q of 2016, Rovi has incurred a total of [] in U.S. licensing expenditures, of which approximately [] was for individuals who are dedicated full-time to patent licensing and [] in allocated overhead expenses. CX-0006C (Bright WS) at Q/A 89-90; CX-1480C (Licensing Financials). Rovi’s

licensing expenses have increased materially, from [] in 2011 to [] in 2015 (and [] for the first half of 2016). CX-1480C (Licensing Financials). [] CX-0006C (Bright WS) at Q/A 90; CX-1480C (Licensing Financials). This large number of individuals who are categorized by Rovi in the ordinary course of business as dedicated to or supported by patent licensing—as well of the expenses related thereto—directly lead to the patent licensing royalties which make up more than [] of Rovi’s overall revenues.

Rovi Br. at 350-51.

The administrative law judge finds that the Bright Data shows that Rovi invests in licensing the guidance portfolio. [] See CX-0006C (Bright WS) at Q/A 89-90; CX-1480C (Licensing Financials). The data also show that Rovi has spent [] in allocated overhead expenses. *See id.*

b) Armaly Allocation

Rovi argues:

Second, Samir Armaly, Rovi’s Executive Vice President of Intellectual Property and Licensing, provided an alternative, conservative allocation of employee time spent on patent licensing based on his personal experience, discounting activities such as litigation or patent prosecution (which, as noted above, is not required by Commission precedent). CX-0001C (Armaly WS) at Q/A 53; CX-

0900C (Armaly Estimate of Patent Licensing Activity); *see also* CX-0006C (Bright WS) at Q/A 95-99. Since 2008, Mr Armaly has led Rovi's patent licensing organization and manages Rovi's patent licensing business through which Rovi offers for license to third parties its patented technology innovations developed over the last several decades. CX-0001C (Armaly WS) at Q/A 5, 6, 18. Mr. Armaly's responsibilities include all aspects related to Rovi's patent licensing business, including (1) development and management of the patent portfolio (both through internal research and development and, where appropriate, acquiring patents from other companies), (2) monetizing Rovi's patent portfolio through third-party licenses, and (3) if necessary, litigation associated with Rovi's patent portfolio when commercial negotiations are not successful, and he is responsible for the overall P&L of Rovi's patent licensing business and also advises Rovi's management on legal and strategic issues related to Rovi's patent business. CX-0001C (Armaly WS) at Q/A 5.

Based on Mr. Armaly's calculations, approximately [] Rovi employees spent on average [] of their time on U.S. patent licensing. CX-0900C (Armaly Estimate of Patent Licensing Activity Allocation); CX-0001C (Armaly WS) at Q/A 53; *see also* CX-0007C (Putnam WS)

at Q/A 203, 206-08. Mr. Bright then provided compensation information, kept in the ordinary course of Rovi's business, for these individuals for 2015 and the first half of 2016—noting that over these 18 months, these individuals were paid a total of [], approximately [] of which was attributable to domestic patent licensing activities based on Mr. Armaly's estimates. CX-0006C (Bright WS) at Q/A 99.

Rovi Br. at 351-52.

The administrative law judge finds that the Armaly allocation shows that Rovi invests in licensing the guidance portfolio. In particular, the data show that Rovi employed about [] full-time employees [] employees who spent [] of their time on U.S. patent licensing) in 2015-16, and it spent approximately [] in compensating those employees. *See* CX-0006C (Bright WS) at Q/A 99; CX-0900C (Armaly Estimate of Patent Licensing Activity Allocation); CX-0001C (Armaly WS) at Q/A 53.

c) Putnam Allocation

Rovi argues:

[]

Rovi Br. at 352-53.

Comcast argues that Dr. Putnam's testimony is unreliable because he "failed to account for Mr. Armaly's (or Mr. Bright's) testimony or explain how he de-allocated from Rovi's initial or updated claimed expenditures." Resps. Br. at 374-75. Comcast also points to inconsistencies between figures and analysis

provided at different points throughout the investigation. *Id.*

The administrative law judge finds that the Putnam allocation shows that Rovi invests in licensing the guidance portfolio. In particular, the data show that Rovi employed []

2. Substantiality of Licensing Investment

In assessing substantiality of a licensing investment, the Commission considers: (1) the nature of the industry and the resources of the complainant; (2) the existence of other types of exploitation activities; (3) the existence of license-related “ancillary” activities; (4) whether complainant’s licensing activities are continuing; (5) whether complainant’s licensing activities are the type of activities that are referenced favorably in the legislative history of section 337(a)(3)(C); and (6) the complainant’s return on its licensing investment. *See Navigation Devices*, Comm’n Op. at 15-16. There is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the ‘substantial investment’ requirement” of section 337(a)(3)(C). *See Stringed Musical Instruments*, Comm2008 WL 2139143 at *14.

This is Rovi’s argument:

[]

However measured, Rovi’s investments in licensing its guidance patent portfolio are *at least* [] million dollars per year. Any alleged weakness in the nexus of these licensing investments to the Asserted Patents is far outweighed by these investments’ clear substantiality.

Navigation Devices, Inv. No. 337-TA-694, Comm'n Op. at 25.

Whether measured by (1) Rovi's ordinary course documents [the Bright data], (2) Mr. Armaly's alternative estimates, or (3) Dr. Putnam's independent analysis based on (1) and (2), these licensing activities and related investments are indisputably of a large magnitude, generate more than half of Rovi's revenues, and are substantial within the meaning of Section 337(a)(2)-(3).

Rovi Br. at 362-63.

Within the *Navigation Devices* framework, Comcast argues that Rovi has not shown the investments are substantial. Resps. Br. at 387-90.

a) Nature of the Industry and Complainant's Resources;

In *Liquid Crystal Display Devices*, the administrative law judge found the complainant's investments were significant in part because they had successfully licensed the portfolio at issue to "a large portion of the industry." *Liquid Crystal Display Devices*, Comm'n Op. at 123.

Comcast argues that Rovi's expense are not substantial in relation to its total expenses and because Mr. Armaly has split time between different licensing efforts. *See* Resps. Br. at 388.

Here, the evidence shows that Rovi has licensed its portfolio to a nearly the entire pay-TV industry. *See* CX-0896C; CX-0001C at Q/A 30; CX-0007C (Putnam WS) at Q/A 196. Accordingly, the administrative law

judge has determined that this factor supports a finding that the investments are substantial, as nearly the entire industry has licensed Rovi's portfolio.

b) Other Types of Exploitation Activities;

In addition to Rovi's expenditures on compensation and overhead related to licensing the guidance portfolio, described above, Rovi makes investments in plant and equipment and employs labor and capital to exploit the asserted patents through research and development for various products, including the TotalGuide products.

This factor favors finding that Rovi's investment is substantial.

c) Existence of License-related "Ancillary" Activities;

Rovi has not addressed ancillary activities. *See generally* Rovi Br., Section IX(C)(4)(e). Accordingly, this factor does not support a finding that Rovi's investment is substantial.

d) Continuing Licensing Activities

Comcast argues:

Considering that Rovi has licenses with nearly all of the other major Pay-TV providers (besides Comcast), whether Rovi's continuing domestic licensing-related activities will be substantial remains unclear, especially given the declining market for Rovi's IPG products.

Resps. Br. at 389.

Rovi has not addressed this factor, although the administrative law judge is aware of parallel litigation pending in district court. *See generally* Rovi Br., Section IX(C)(4)(e). There is no indication that Rovi has stopped filing IPG patent applications. Further, given that Rovi has licensed almost all of the industry, this factor does not necessarily carry much significance as it might for licensors who have licensed only a minority of the industry.

This factor does not support a finding that Rovi's licensing investment is substantial.

***e) Referenced Favorably in the
Legislative History***

Comcast argues:

The Commission has identified two types of “licensing” activities: (1) production-driven activities and (2) revenue-driven activities, the latter which are accorded less weight. *See* Navigation Devices, Comm’n Op. at 25 n.20 (citation omitted). Rovi’s licensing activities are revenue-driven. Dr. Putnam admits “some of Rovi’s licensing is, of course, ‘revenue-oriented[.]’ CX-0007C (Putnam WS) at Q/A 306. Dr. Putnam also admits Rovi’s licensing program is primarily targeted at “Tier One” subscription-TV service providers, which are Rovi’s most profitable negotiations. *See id.* at 231. Rovi’s Tier One program targets the ***renewal*** of agreements, reflecting that Rovi’s activities are revenue-driven because Tier One providers’ “production” already exists. For example, in June

2015, Rovi explained that renewals represented the largest opportunity for the company. RX-0017C (IP & Licensing Presentation) at RX-0017C.0021. Thus, the evidence shows Rovi's activities are revenue-driven and therefore should be given less weight. *See Navigation Devices*, Comm'n Op. at 25.

Resps. Br. at 389-90.

As shown in the domestic industry and the reviews of Rovi's licensing revenue, the administrative law judge has determined that Rovi is engaged in both production-driven and revenue-driven licensing.

Accordingly, the administrative law judge finds that factor is neutral.

f) Return on Licensing Investment

Comcast argues that Rovi's revenue is due to the portfolio, not the asserted patents. Resps. Br. at 390-91 ("Rovi's revenue is derived from its portfolio as a whole rather than any individual patents.").

The evidence shows that between "2010 and 2015, Rovi's patent licenses generated Rovi close to [] in revenue." Rovi Br. at 3 (citing CX-0007C (Putnam WS) at Q/A 86; CX-0828C (Rovi Income Statement Charts) at 4).

Although the royalties received under a license "do not constitute the investment itself," they do constitute circumstantial evidence that a substantial investment was made. *Navigation Devices*, Comm'n Op. at 24.

This factor favors finding that Rovi's investment is substantial.

g) Conclusion

Assuming that the nexus requirement is met, the administrative law judge finds that, taken as a whole, Rovi's investment in licensing the asserted patents is substantial.

3. Nexus Requirement

a) The Number of Patents in the Portfolio

Comcast argues:

Dr. Putnam has no opinion on this factor, Tr. 422:20-423:4, which he completely failed to evaluate. *See* RX-0852C (Schoettelkotte RWS) at Q/A 95. Yet the large number of patents in the portfolio weighs against a nexus. "All things being equal, the nexus between licensing activities and an asserted patent may be stronger when the asserted patent is among a relatively small group of licensed patents." *Navigation Devices*, Comm'n Op. at 11. The Asserted Patents are part of a huge portfolio [] This factor weighs strongly against a nexus.

Resps. Br. at 376-77.

The evidence shows that Rovi licenses its patents on a portfolio basis. CX-0001C at Q/A 28, 31 (Rovi and licensees "negotiate a portfolio-wide license that includes all patents in the guidance portfolio"). []

Assuming all other factors are equal, the large number of patents in the portfolio, compared to the relatively minute number of asserted patents, suggests that the asserted patents do not have a nexus

to the asserted patents. Accordingly, the administrative law judge finds that this factor weighs against finding a nexus.

b) The Relative Value Contributed by the Asserted Patents to the Portfolio

Rovi generally does not address each patent individually. *See* Rovi Br. at 355-61 (Section IX(C)(4)(d)(iii)). Nonetheless, Rovi argues that it discussed the asserted patents during licensing negotiations, Rovi’s ***portfolio*** is a “de facto” standard, that patent citation data indicates the patents are “base or pioneering” patents, and that the market has recognized the patents’ value in other ways. *Id.*

Likewise, Comcast also does not address each patent individually. *See generally* Resps. Br. at 375 (Section (E)(2)(a)(ii)).

(1) Discussed During Licensing Negotiations

In general, each of the asserted patents was discussed during prior negotiations with []—prominent entities in the pay-TV market. *See* CX-0001C (Armaly WS) at Q/A 74-88; CX-0896C (Rovi Patents Identified to Licenses Chart). Rovi illustrates its point with the following table:

[]

See Rovi Br. at 356 (citing CX-0001C (Armaly WS) at Q/A 74-88; CX-0896C (Rovi Patents Identified to Licenses Chart)).

Comcast argues that the asserted patents “were not featured prominently in negotiations.” Resps. Br. at 377. Comcast argues that the asserted patents were not presented to numerous other licensees.

The administrative law judge has determined that Rovi has shown the accused patents were presented in licensing negotiations. *See* CX-0896C. Accordingly, this factor weighs in Rovi's favor.

(2) Prior Successful Litigation

None of the asserted patents have been asserted in prior litigations. *See* CX-0007C (Putnam WS) at Q/A 243. This factor carries a little weight against finding any particular patent has value, particularly where Rovi has engaged in IPG-related litigation prior to this lawsuit. *E.g., Netflix v. Rovi*, 114 F. Supp. 3d 927 (N.D. Cal. 2015); *IPGs and Parental Controls*, Inv. No. 337-TA-845.

(3) Relation to Technology/Industry Standard

Rovi argues that its **portfolio** is a “de facto” standard in the pay-TV industry, and that this reflects “widespread appreciation of the Asserted Patents’ importance and value.” Rovi Br. at 359. Comcast argues that Dr. Putnam and Mr. Armaly admitted that there is no standard for IPGs. *See* Resps. Br. at 379-80 (citing CX-0007C (Putnam WS) at Q/A 247 (“[T]he Asserted Patents themselves are not ‘standard-essential patents.’”); Tr. 426; Tr. 105-106; JX-0087C (Armaly Dep. Tr.) at 224).

The administrative law judge finds that Rovi has not shown the asserted patents have any nexus to an industry standard. Indeed, Rovi's argument relates its portfolio, not the asserted patents, to an imaginary standard. Accordingly, this factor weighs against finding that the asserted patents have significant relative value.

(4) Base or Pioneering Patent

Rovi relies on testimony from Mr. Armaly and a patent-citation analysis from Dr. Putnam to argue that the asserted patents are base or pioneering patents. Rovi Br. at 359 (citing CX-0001C (Armaly WS) at Q/A 11-13, 17; CX-0007C (Putnam WS) at Q/A 249-56).

Mr. Armaly testified in general terms that IPGs were first developed in the late 1980's:

Q12. You described the evolution from printed program guides to IPGs on the consumer electronics device. When were IPGs first developed?

A. IPG technology was first developed in the late 1980s and early 1990s and has continued to evolve to provide users with access to program information, and in some cases, other features and functionality that facilitate the use and enjoyment of video programming. An early type of IPG was a full-screen "grid guide" that displayed television program listings by time and channel in a two-dimensional grid. The features and functions available through IPGs today are far more extensive and sophisticated.

CX-0002C at Q/A 12. The cited testimony (Q/A 11-13, 17) does not refer to the asserted patents, and it does not explain how those patents were base or pioneering over predecessor technology. At the hearing, Mr. Armaly admitted that no documents or industry statements support his claim that the Asserted Patents are "foundational" in nature. *See* Tr. 105.

Dr. Putnam's citation analysis is limited to three patents, the '556, '801, and '263 Patents. *See* CX-0007C (Putnam WS) at Q/A 254. The '801 Patent shares "essentially the same specification" as the '263 Patent. *See* Resps. Br. at 63; *see also* Rovi Br. at 41 (explaining the patents "stem from a common, parent application filed on July 16, 1999"). Further, accepting Dr. Putnam's analysis would require the administrative law judge to agree with the analysis's definition of "base" and how it is measured (with patent citation data alone). *See* CX-0007C (Putnam WS) at Q/A 251-53, 263. Rovi does not point to any tribunals that have accepted patent-citation analysis testimony as an indicator of value, and during cross examination Dr. Putnam testified that he did not address one article because it involved a particular assumption about innovation and weighted patent counts. *See* Tr. 1256-1257 (discussing RX-0794, Abrams et al., *Understanding the Link Between Patent Value and Citations*).

The lack of technical testimony and the lack of other extrinsic, objective evidence relevant to the base or pioneering nature of any of the asserted patents is a significant obstacle to Rovi's argument. Dr. Putnam's patent-citation analysis, while interesting, does not provide a sufficient basis to conclude that the patents are "base or pioneering" given the lack of corresponding technical testimony and extrinsic evidence. Accordingly, the administrative law judge has determined that Rovi has not shown that any of the asserted patents are base or pioneering patents for purposes of the *Navigation Devices* analysis.

(5) *Infringed or Practiced in the United States*

Rovi argues:

A wide variety of set-top boxes used throughout the industry—not just those imported by Respondents—practice the Asserted Patents. CX-0007C (Putnam WS) at Q/A 245; CX-0001C (Armaly WS) at Q/A 24 27. As the vast majority of the U.S. Pay-TV industry has taken a license to the Asserted Patents, it is reasonable to conclude that a large number of Rovi’s licensees practice the Asserted Patents. CX-0007C (Putnam WS) at Q/A 245. Due to the widespread licensing of Rovi’s guidance portfolio, and the desirability of the features claimed in the Asserted Patents, widespread use of the Asserted Patents is very likely, supporting the finding of a nexus here. *Id.*

Rovi Br. at 361.

Comcast argues that no party has been found to infringe the asserted patents and that Rovi has only attempted to show that three licensees practice the asserted patents. *See* Resps. Br. at 380.

The administrative law judge has determined that the ’263, ’413, and ’512 Patents are infringed or practiced in the United States. *See* Sections V(B), V(E), V(F). Accordingly, this factor weighs in favor of finding that the ’263, ’413, and ’512 Patents have relative value within the portfolio.

(6) Other Recognition of Value

Rovi argues that its patent-citation analysis also shows that the market recognizes the value of the asserted patents. Rovi Br. at 360. Rovi argues “Dr.

Putnam factored in citation data and other economic considerations, such as mentions in licensing negotiations, to determine that the Asserted Patents fall in the [] *Id.* Dr. Putnam’s analysis comments that the []. *Id.*

Comcast argues that “Mr. Schoettelkotte identifies multiple flaws with Dr. Putnam’s methodology and results.” Resps. Br. at 381 (citing RX-0852C (Schoettelkotte RWS) at Q/A 123-130). Comcast critiques Dr. Putnam’s methodology insofar as it relies “heavily” on self-citations and also notes that Dr. Putnam only ranked three of the asserted patents. *Id.* Comcast further notes that “a patent Dr. Putnam ranked seventh highest was found in Inv. No. 337-TA-845 to have a ***weak nexus*** to Rovi’s licensing activities.” *Id.* (emphasis added by Comcast). Further, Comcast has pointed to statements by Mr. Armaly commenting that Rovi’s portfolio is not as susceptible to challenges given its size:

Ultimately one of the advantages that Rovi has in this area [of *Alice* challenges] is the size and the state of our patent portfolio. Companies with only handful of patents or with only issued patents without pending applications would likely have more risk under the new *Alice* test. This is simply not the position that Rovi is in.

...

[in commenting on a litigation involving Netflix, Mr. Armaly said:] As quick reminder only 5 patents in our portfolio are at issue in this case and Rovi’s portfolio includes more than 5,000 issued

patents and pending applications around the world. Please remember that it only takes claim of patent to survive for us to be able to prevail in this litigation. And we have an extensive portfolio of additional patents that we can litigate on should that be necessary to drive an acceptable resolution.

RX-0611 at 8. These statements indicate that Rovi itself believes the market recognizes the value of its portfolio, not the value of a handful of particular patents.

Dr. Putnam's analysis does not sufficiently separate value of the asserted patents from the value of the portfolio because there is no assessment of whether other patents (or sub portfolios) in the portfolio are driving the value that is reflected in the royalties paid. For example, Dr. Putnam's analysis approaches an invention about tuner conflicts (the '512 Patent) in the same way it approaches an invention about remote access functionality (e.g., the '263 and '413 Patents) when these patents are clearly of different value. Further, Dr. Putnam's analysis does not analyze three of the asserted patents.

Accordingly, the administrative law judge has determined that Rovi has not shown that the asserted patents have recognized relative value apart from the portfolio.

(7) Conclusion on the Relative Value

While the asserted patents were discussed during licensing negotiations and three of the patents were found infringed or practiced, the remaining factors either are neutral, and do not support Rovi's

argument, or weigh against finding that the asserted patents have a significant relative value. Accordingly, this factor does not support a nexus.

c) The Prominence of the Asserted Patent in Licensing Discussions, Negotiations and any Resulting License Agreement

Rovi argues that the asserted patents were featured prominently in negotiations:

[]

Rovi Br. at 358. Rovi also relies on “call outs” (*i.e.*, high-level infringement charts) involving the asserted patents. *See id.* (citing CX-0001C (Armaly WS) at Q/A 80; CX-0739C (Roadmap for Verizon)).

Comcast argues that Rovi should have examined all of its negotiations and that doing so would have “reached quite reached quite a different conclusion.” Resps. Br. at 377 (citing RX-0852C (Schoettelkotte RWS) at Q/A 101-111). Comcast also notes that:

[] Rovi attempts to explain the value of its portfolio as opposed to the value of individual patents and believes that the breadth and depth of Rovi’s portfolio as a whole puts Rovi in a good position. *See id.*; *see also* Tr. 102:25-104:22. Comcast’s Mr. Marcus confirmed no individual Rovi patent or group of patents was presented to Comcast as more valuable than any other. *See* RX-0001C (Marcus WS) at Q/A 36-51.

Id. at 378 (emphasis in original, footnote omitted).

The administrative law judge has determined that the evidence does not show the asserted patents were particularly prominent in discussions, negotiations, or in any subsequent licenses. Simply put, the frequency that Rovi selected a given patent alone is not enough to conclude that stood out in a meaningful way, particularly in light of Mr. Armaly's comments about the value of Rovi's portfolio. *See* RX-0611 at 8.

Accordingly, this factor does not support finding a nexus.

***d) The Scope of the Technology Covered
by the Portfolio Compared to the
Scope of the Asserted Patents***

Comcast argues that the scope of the patents is narrow in relation to the scope of the portfolio: "Rovi's portfolio covers all different types of devices, including televisions, STBs, mobile devices, tablets, PCs, as well as different types of technologies, including linear programming, DVRs, video-on-demand, TV Everywhere, and over-the-top streaming." Resps. Br. at 383 (citing RX-0609 (2014 Shareholder Call) at 8).

Rovi has not addressed the scope of its portfolio in relation to the scope of the asserted patents. *See generally* Rovi Br., Section IX(C)(4) ("scope" is not discussed), Rovi Reply, Section X (same).

The administrative law judge has determined that the scope of the asserted patents is narrow relative to the scope of the portfolio, which includes diverse technologies such as televisions, STBs, mobile devices, tablets, PCs, as well as different types of technologies, including linear programming, DVRs, video-on-demand, TV Everywhere, and over-the-top streaming. Accordingly, this factor does not support a nexus.

e) Conclusion on Nexus

The administrative law judge has determined that Rovi has not shown a nexus between its activities and licensing the asserted patent in the United States. The high number of patents in Rovi's portfolio, the lack of relative value of the asserted patents, and the lack of a showing pertaining to the scope of the patents in comparison to the portfolio are significant obstacles to finding a nexus.

Accordingly, the administrative law judge has determined that Rovi has not shown a domestic industry based on licensing under section 337(a)(3)(C).

E. Rovi's Domestic Industry Based on Verizon Investments

Rovi argues that Verizon has made significant domestic investments in plant and equipment and significantly employed labor and capital relating to products that practice the asserted patents that independently satisfy the economic prong of the domestic industry requirement. *See* Rovi Br. at 363.

1. Investment in Plant and Equipment

For Verizon plant and equipment, Rovi argues:

Verizon has invested at least \$23 billion in development of the FiOS service in the U.S. since 2004, and in 2016 announced its plan to continue capital expenditures on FiOS. CX-0249 (Verizon 2015 10-K); CX-0007C (Putnam WS) at Q/A 321; CX-1937C (2nd Errata to Putnam WS). As of July 2016, Verizon had invested an average of [] in equipment costs per home passed over the last year between

the New England, New York, and Mid-Atlantic regions alone. CX-0221C (FiOS Profitability Analysis); CX-0249 (Verizon 2015 10-K); CX-0007C (Putnam WS) at Q/A 322; CX-1937C (2nd Errata to Putnam WS). These massive investments in equipment relating to products and services which practice each of the Asserted Patents are clearly significant in relation to Verizon's business and product lines, satisfying the economic prong of the, domestic industry requirement under § 337(a)(3)(A). CX-0007C (Putnam WS) at Q/A 326 27.

Rovi Br. at 364.

For Verizon plant and equipment, Comcast argues:

Rovi failed to show that Verizon made investments under Prongs A or B. Rovi failed to show how Verizon's alleged overall investments relate to protected articles. Dr. Putnam claims that "Rovi contends that certain Verizon STBs used in the provision of Verizon's FiOS Pay-TV services practice certain claims of each of the Asserted Patents." CX-0007C (Putnam WS) at QA 319. Dr. Putnam identified certain Verizon STBs as "DI products," (*Id.* at QA 73), but none of Verizon's investments are tied to those (or any) particular products. The only financial document Dr. Putnam cites in his discussion is a Verizon 2015 Annual Report. *See id.* at QA 318-327 (citing CX-

0249 (Verizon 2015 Form 10-K) in QA 325).

Dr. Putnam simply concludes that Verizon's average investment of [] per subscribing home over the last year ending July 2016 satisfies Prong A. *Id.* at QA 327. Dr. Putnam provides no evidentiary support or analysis for his claim. For example, Dr. Putnam fails to determine what portion of Verizon's alleged investments could be allocated to the Verizon STB products he identifies. *See id.* at QA 73; *see also* Tr. 402:7-18 (Dr. Putnam admitting he did not know which particular Verizon STBs actually implement the Rovi IPG products, nor did he determine "set-top-specific investments" but instead relied upon "ecosystem-level investments").

Resps. Br. at 390-91.

The administrative law judge finds that the evidence Rovi relies upon does not establish a domestic industry for purposes of § 337(a)(3)(A). Rovi's suggestion of attributing \$23 billion in investment for the Verizon FiOS network—a number that captures Verizon's fiber optic network and corporate acquisition funds, *see* CX-0007C (Putnam WS) at Q/A 321—to the asserted patents (*i.e.*, program guides and set-top boxes) is simply not supported, as Rovi has not shown a plausible basis for concluding that the six asserted patents are responsible for investment of this type. Further, Rovi's arguments and evidence are not sufficiently tied to the protected articles. For instance, Dr. Putnam testified that his analysis was tied to

“ecosystem-level investments.” *See* Tr. (Putnam) at 402. On the whole, the evidence is too weak to support a finding that the above Verizon investments constitute an independent domestic industry.

2. Employment of Labor or Capital

For Verizon labor or capital, Rovi argues:

In addition to the above investments in plant and equipment, Verizon has made additional significant investments in labor and capital to support its patent-practicing FiOS products and services. Between January 2016 and July 2016, Verizon spent about []. These represent significant investments in the employment of labor capital relating to the patent-practicing FiOS products under § 337(a)(3)(B), such that Verizon’s activities satisfy the economic prong of the domestic industry requirement. CX-0007C (Putnam WS) at Q/A 326-27.

Rovi Br. at 364.

For Verizon labor or capital, Comcast argues:

. . . Similarly, Dr. Putnam simply concludes that Verizon’s \$23B investment in the development of FiOS since 2004 [] Dr. Putnam provides no evidentiary support or analysis for his claim. For example, Dr. Putnam fails to determine what portion of the alleged investments could be allocated to the Verizon STBs he identifies. *See id.* at QA 73; *see also* Tr. 402:7-18 (admitting he did not know which particular Verizon

STBs actually implement the Rovi IPG products, nor did he determine “set-top-specific investments” but instead relied upon “ecosystem-level investments”).

Resps. Br. at 390-91.

The administrative law judge finds that the evidence Rovi relies upon does not establish a domestic industry for purposes of § 337(a)(3)(B). Rovi’s suggestion of attributing large amounts of “construction labor per home” from the Verizon FiOS network to the asserted patents (*i.e.*, program guides and set-top boxes) is simply not supported, as Rovi has not shown a plausible basis for concluding that the six asserted patents are responsible for investment of this type. Further, Rovi’s arguments and evidence are not sufficiently tied to the protected articles. For instance, Dr. Putnam testified that his analysis was tied to “ecosystem-level investments.” *See* Tr. (Putnam) at 402. On the whole, the evidence is too weak to support a finding that the above Verizon investments constitute an independent domestic industry.

F. Rovi’s Domestic Industry Based on SuddenLink Investments

Rovi argues that SuddenLink has made significant domestic investments in plant and equipment and significantly employed labor and capital relating to products that practice the asserted patents that independently satisfy the economic prong of the domestic industry requirement. *See* Rovi Br. at 364-65.

1. Investment in Plant and Equipment

For SuddenLink plant and equipment, Rovi argues:

Suddenlink invests heavily in its Pay-TV services and equipment, which use the Asserted Patents to deliver content to Suddenlink's customers. At least [] set-top boxes have utilized Rovi's A28 or Firefly i-Guide interactive program guides, each of which practice each of the Asserted Patents. CX-0007C (Putnam WS) at Q/A 330. These purchases indisputably relate to "equipment" within the meaning of Section 337(a)(3)(A). *See* Schoettelkotte Tr. 601-02. This significant investment by Suddenlink in equipment embodying the Asserted Patents satisfies the economic prong of the domestic industry requirement under § 337(a)(3)(A). CX-0007C (Putnam WS) at Q/A 334-35.

Rovi Br. at 365.

For SuddenLink plant and equipment, Comcast argues:

Rovi failed to show that Suddenlink made investments under Prongs A or B. Rovi failed to show how Suddenlink's overall investments relate to protected articles. Dr. Putnam claims that "Rovi contends that certain STBs used in the provision of SuddenLink's Pay-TV services utilize Rovi's i-Guide software, and therefore practice certain claims of certain of the Asserted Patents." CX-0007C (Putnam WS) at QA 330. Dr. Putnam identified certain STBs as "DI products," (*Id.* at QA 73), but none of the

Suddenlink investments are directed to those or other products. Dr. Putnam only cites are annual or quarterly reports of Cequel Communications (Suddenlink's parent). *See id.* at QA 328-336 (citing CX-0235 (Cequel 2011 Annual Report), CX-0236 (Cequel 2012 Annual Report), CX-0237 (Cequel 2013 Annual Report), CX-0238 (Cequel 2014 Annual Report), and CX-0250 (Suddenlink Q3 and YTD 2015 Results)).

Dr. Putnam claims Suddenlink's purchase of at least [] allegedly using Rovi's i-Guide satisfies Prong A. *See* CX-0007C (Putnam WS) at QA 330 and 335. Dr. Putnam provides no evidentiary support for this figure, nor provides an actual monetary amount of Suddenlink's alleged investment. *See id.* And, for example, Dr. Putnam fails to determine what portion of the alleged investments could be allocated to the Suddenlink STBs he identifies. *See id.* at QA 73; *see also* Tr. 402:9-18 (Dr. Putnam admitting he did not know which particular Suddenlink STBs actually implement the Rovi IPG products, nor did he determine "set-top-specific investments" but instead relied upon "ecosystem-level investments").

Resps. Br. at 392.

The administrative law judge finds that the evidence Rovi relies upon does not establish a domestic industry for purposes of § 337(a)(3)(A). Rovi has not

provided evidentiary support to establish the sales of the set-top boxes or financial data to demonstrate the investment was significant. *See, e.g.*, Tr. at 401-403 (Dr. Putnam did not “associate any investment of any kind whatsoever to any specific Suddenlink set-top box”). On the whole, the evidence is too weak to support a finding that the above SuddenLink investments constitute an independent domestic industry.

2. Employment of Labor or Capital

For SuddenLink labor or capital, Rovi argues:

In addition to its significant investments in plant and equipment, Suddenlink employs significant labor and capital to support its Pay-TV products and services embodying the Asserted Patents. First, SuddenLink’s purchases of its [] set-top boxes utilizing Rovi’s A28 or Firefly i-Guide IPGs constitute significant capital expenditures relating to patent-practicing products, satisfying the economic prong of the domestic industry requirement. *See* Schoettelkotte Tr. 602-03. Furthermore, in the past five years, SuddenLink has invested at least \$2.9 billion in programming costs, which represent capital investments contributing to the development of its television and video products. CX-0007C (Putnam WS) at Q/A 331-32. These products are used to provide cable and streaming services exclusively to customers located within the U.S., including basic, digital, premium, video-

on-demand and pay-per-view programming provided to both residential and commercial customers. *Id.* SuddenLink also launched its SuddenLink2GO mobile app in early 2014, which allows customers to access live TV and on-demand TV shows from their mobile devices. *Id.* From 2011 through 2015, approximately 1.1 million customers subscribed to SuddenLink's television and video services, generating an average of \$1.1 billion per year in revenues. *Id.* at Q/A 331-32. Suddenlink's \$2.9 billion capital investment in products and services practicing the Asserted Patents clearly qualifies as significant employment of capital under § 337(a)(3)(B), such that Suddenlink's activities satisfy the economic prong of the domestic industry requirement. *Id.* at Q/A 334-35.

Rovi Br. at 365-66.

For SuddenLink labor or capital, Comcast argues:

For Prong B, Dr. Putnam claims that in the past five years, Suddenlink has invested at least \$2.9B in programming costs, which contributed to the development of its television and video products. *See id.* at QA 331. However, Suddenlink's programming costs consist primarily of costs paid to programmers for basic, digital, premium, video on demand and pay-per-view programming. *See* CX-0239 (Cequel 2015 Annual

Report) at CX-0239.000051. As such, these expenses are not directed to any Suddenlink investment (significant or otherwise) in labor or capital. Moreover, Dr. Putnam fails to determine what portion of the alleged investments could be allocated to the Suddenlink STBs he identifies. *See* CX-0007C (Putnam WS) at QA 73; *see also* Tr. 402:9-18 (Dr. Putnam admitting he did not know which particular Suddenlink STBs actually implement the Rovi IPG products, nor did he determine “set-top-specific investments” but instead relied upon “ecosystem-level investments”).

Resps. Br. at 392-93.

The administrative law judge finds that the evidence Rovi relies upon does not establish a domestic industry for purposes of § 337(a)(3)(B). Rovi’s suggestion of attributing \$2.9 billion of costs that primarily relate to programming (basic, digital, premium, video-on-demand and pay-per-view) to the asserted patents (*i.e.*, program guides and set-top boxes) is simply not supported, as Rovi has not shown a plausible basis for concluding that the six asserted patents are responsible for investment of this type. Further, Rovi’s arguments and evidence are not sufficiently tied to the protected articles. For instance, Dr. Putnam testified that his analysis was tied to “ecosystem-level investments.” *See* Tr. (Putnam) at 402. On the whole, the evidence is too weak to support a finding that the above SuddenLink investments constitute an independent domestic industry.

* * *

VII. CONCLUSIONS OF FACT AND LAW

Jurisdiction and Importation

- 1) The Commission has personal jurisdiction in this investigation.
- 2) The Commission has subject matter jurisdiction in this investigation.
- 3) The Commission has *in rem* jurisdiction in this investigation.
- 4) ARRIS is an importer of the accused products that it manufactures, under 19 U.S.C. § 1337(a)(1)(B).
- 5) Technicolor is an importer of the accused products that it manufactures, under 19 U.S.C. § 1337(a)(1)(B).
- 6) Comcast is sufficiently involved in the importation of the accused products that it satisfies the importation requirement, under 19 U.S.C. § 1337(a)(1)(B). Comcast does not sell the accused products for importation, and it does not sell the accused products after importation, under 19 U.S.C. § 1337(a)(1)(B).
- 7) Rovi possesses all substantial rights in the asserted patents and has standing to bring its complaint before the Commission.

X1 Products

- 8) The ARRIS XG1v3 (X1) AX013ANC is a representative product (DVR-enabled) for all of the asserted patents.
- 9) The Pace XiD (PXD01ANI) is a representative of the non-DVR X1 set-top boxes analyzed for U.S. Patent No. 8,566,871.

- 10) The accused X1 products have been imported into the United States.
- 11) The accused X1 products infringe claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263 and claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413 under 35 U.S.C. § 271(a).
- 12) The accused X1 products do not infringe any asserted claim of U.S. Patent Nos. 6,418,556, 8,046,801, 8,566,871, and 8,621,512.
- 13) With respect to the accused X1 products, Comcast has induced its customers to infringe claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263 and claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413 under 35 U.S.C. § 271(b).
- 14) With respect to the accused X1 products, Comcast has not induced its customers to infringe any asserted claim of U.S. Patent Nos. 6,418,556, 8,046,801, 8,566,871, and 8,621,512.
- 15) With respect to the accused X1 products, Comcast has not induced ARRIS or Technicolor to infringe under 35 U.S.C. § 271(b).
- 16) With respect to the accused X1 products, ARRIS and Technicolor are not contributory infringers under 35 U.S.C. § 271(c).

Legacy Products

- 17) The Motorola DCX3501/M is a representative product for all of the patents it is alleged to infringe.

- 18) The accused Legacy products have been imported into the United States.
- 19) The accused Legacy products infringe claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413; and claims 1, 10, 13, and 22 of U.S. Patent No. 8,621,512 under 35 U.S.C. § 271(a).
- 20) The accused Legacy products do not infringe any asserted claim of U.S. Patent Nos. 6,418,556 and 8,046,801. (Rovi has not accused the Legacy products of infringing U.S. Patent No. 8,566,871.)
- 21) With respect to the accused Legacy products, Comcast has induced its customers to infringe claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263 and claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413.
- 22) With respect to the accused Legacy products, Comcast has not induced its customers to infringe any asserted claim of U.S. Patent Nos. 6,418,556, 8,046,801, and 8,621,512. (Rovi has not accused the Legacy products of infringing U.S. Patent No. 8,566,871.)
- 23) With respect to the accused Legacy products, Comcast has not induced ARRIS or Technicolor to infringe under 35 U.S.C. § 271(b).
- 24) With respect to the accused Legacy products, ARRIS and Technicolor are not contributory infringers under 35 U.S.C. § 271(c).

Design Arounds and Additional Non-Infringement Arguments

- 25) Comcast's proposed design arounds for U.S. Patent Nos. 6,418,556 and 8,566,871 are too hypothetical to adjudicate.
- 26) Comcast's proposed design around for the X1 system, for U.S. Patent No. 8,621,512, does not infringe the Patent.
- 27) Comcast's proposed design around for the Legacy system, for U.S. Patent No. 8,621,512, is too hypothetical to adjudicate.
- 28) Comcast's proposed design arounds for the X1 and Legacy systems, for U.S. Patent Nos. 8,006,263, 8,046,801, and 8,578,413, infringe those patents.

Patent Eligibility and Validity

- 29) Comcast has not shown by a preponderance of the evidence, or through clear and convincing evidence, that the asserted claims of the patents in suit are ineligible for patenting under 35 U.S.C. § 101.
- 30) Comcast has not shown, through clear and convincing evidence, that the asserted claims of the U.S. Patent Nos. 6,418,556; 8,006,263; 8,046,801; 8,566,871; and 8,578,413 are invalid under 35 U.S.C. §§ 102, 103, or 112.
- 31) Comcast has shown, through clear and convincing evidence, that claims 1, 10, 13, and 22 U.S. Patent No. 8,621,512 are invalid under 35 U.S.C. § 103, in light of Nagano (RX-0153), in view of the general knowledge of a person of ordinary skill in the art, and/or Sano (RX-

0152) or Chun (RX-0158). The proffered objective evidence of non-obviousness does not support a finding that the Patent is not obvious.

- 32) Comcast has not shown, through clear and convincing evidence, that the asserted claims of U.S. Patent No. 8,621,512 are invalid under 35 U.S.C. § 103, in light of Sano (RX-0152) *et al.*, Prevue *et al.*, and Alexander *et al.*
- 33) Comcast has not shown, through clear and convincing evidence, that the asserted claims of the U.S. Patent Nos. 8,621,512 are invalid under 35 U.S.C. § 112.

Domestic Industry

- 34) The domestic industry's technical prong requirement has been satisfied with respect to the infringed patents, U.S. Patent Nos. 8,006,263, 8,578,413, and 8,621,512.
- 35) The domestic industry's technical prong requirement has not been satisfied with respect to U.S. Patent Nos. 6,418,556, 8,046,801, and 8,566,871.
- 36) The domestic industry's economic prong requirement has been satisfied under § 337(a)(3)(A), as there is a significant investment in plant and equipment with respect to the articles protected by the asserted patents.
- 37) The domestic industry's economic prong requirement has been satisfied under § 337(a)(3)(B), as there is a significant

employment of labor or capital with respect to the articles protected by the asserted patents.

- 38) The domestic industry's economic prong requirement has been satisfied under § 337(a)(3)(C), as there is a substantial investment in engineering and research and development with respect to the articles protected by the asserted patents.
- 39) Rovi has not shown that it has satisfied the domestic industry's economic prong through a substantial investment in patent licensing, as Rovi has not satisfied the nexus requirement.

Licensing and Additional Defenses

- 40) Comcast had an express license to "make and have made" and to import and otherwise commercialize products imported before April 1, 2016; products imported before April 1, 2016 are not unlawful imports, and there has been no an unfair act which would constitute a violation Section 337 for these products. No determination has been made on whether a subsequent domestic activity connected to products imported before April 1, 2016 (*e.g.*, *any* use or sale, completed on or after April 1, 2016, of a set-top box imported before April 1, 2016) infringes the asserted patents.
- 41) Comcast's express license expired on March 31, 2016. *See* JX-0050C at 34.
- 42) Comcast does not have an implied patent license to Rovi's guidance portfolio, including the asserted patents.

- 43) Comcast has not shown the asserted patents are exhausted, as Comcast has not identified a sale for purposes of patent exhaustion or that Comcast has infinite rights to reproduce the Legacy guide.
- 44) Comcast has not shown that exhaustion pertains to the X1 guide.
- 45) ARRIS has not shown that the ARRIS-Rovi IPG License mandates terminating this investigation with respect to the ARRIS respondents.
- 46) ARRIS has not shown that the ARRIS-Rovi IPG License gives ARRIS an implied license that operates as a defense to Rovi's claims.
- 47) ARRIS has not shown that equitable estoppel applies to bar Rovi's claims.
- 48) ARRIS has not shown that waiver applies to bar Rovi's claims.
- 49) ARRIS's arguments about the ARRIS-Rovi IPG License are not barred by issue preclusion, because terminating an investigation under § 337(c) differs from transferring venue pursuant to a forum selection clause.

VIII. INITIAL DETERMINATION ON VIOLATION

Accordingly, it is the initial determination of the undersigned that a violation of section 337 (19 U.S.C. § 1337) has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain digital video receivers and hardware and software components

thereof, with respect to U.S. Patent Nos. 8,006,263 and 8,578,413.

It is held that a violation has not occurred with respect to U.S. Patent Nos. 6,418,556, 8,046,801, 8,566,871, and 8,621,512.

Further, this initial determination, together with the record of the hearing in this investigation consisting of (1) the transcript of the hearing, with appropriate corrections as may hereafter be ordered, and (2) the exhibits received into evidence in this investigation, is hereby certified to the Commission.

In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given in camera treatment.

The Secretary shall serve a public version of this initial determination upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order, as amended, issued in this investigation.

Pursuant to 19 C.F.R. § 210.42(h), this initial determination shall become the determination of the Commission unless a party files a petition for review pursuant to § 210.43(a) or the Commission, pursuant to § 210.44, orders on its own motion a review of the initial determination or certain issues herein.

IX. ORDER

To expedite service of the public version, the parties are hereby ordered to file with the Commission Secretary no later than June 5, 2017, a jointly marked copy of this initial determination that includes bold, red brackets to show any portion considered by the

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parties (or their suppliers of information) to be confidential. The parties shall simultaneously file a joint list indicating each page on which such a bracket is to be found and which party contends the corresponding information is confidential. At least one copy of such a filing shall be served upon the office of the undersigned, and the brackets shall be formatted in bold, red text. If a party (including any supplier of information) considers nothing in the initial determination to be confidential, and thus makes no request that any portion be redacted from the public version, then a statement to that effect shall be filed.

/s/ David P. Shaw

David P. Shaw

Administrative Law Judge

Issued: May 26, 2017

[CERTIFICATES OF SERVICE OMITTED]

APPENDIX D

**UNITED STATES INTERNATIONAL TRADE
COMMISSION**

Investigation No. 337-TA-1001

**In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF**

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Business
Communications, LLC, One Comcast Center, 1701
John F. Kennedy Blvd., Philadelphia, Pennsylvania
19103 (“Respondent”), cease and desist from
conducting any of the following activities in the United
States: importing, selling, offering for sale, leasing,
offering for lease, renting, offering for rent, marketing,
advertising, distributing, transferring (except for
exportation), and soliciting U.S. agents or distributors
for, certain digital video receivers and hardware and
software components thereof covered by (1) one or
more of claims 1, 2, 14, and 17 of U.S. Patent No.
8,006,263; or (2) one or more of claims 1, 3, 5, 9, 10, 14,
and 18 of U.S. Patent No. 8,578,413; (“the Asserted
Patents”) in violation of section 337 of the Tariff Act of
1930, as amended (19 U.S.C. 1337).

I.

Definitions

As used in this order:

- (A) “Commission” shall mean the United
States International Trade
Commission.

- (B) “Complainants” shall mean Rovi Corporation and Rovi Guides, Inc., both of San Carlos, CA.
- (C) “Respondent” shall mean Comcast Business Communications, LLC, One Comcast Center, 1701 John F. Kennedy Blvd., Philadelphia, Pennsylvania 19103.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids

liability for infringement of certain claims of the Asserted Patents.

II.

Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of, Respondent.

III.

Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order. For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after importation, rent after importation,

transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order. Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were

imported before the effective date of this Order.

**V.
Reporting**

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, <https://www.usitc.gov/>

secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001.

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must be on the protective order entered in the investigation.

- (B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;
- (B) Serve, within fifteen days after the succession of any persons referred to

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in subparagraph VII(A) of this order,
a copy of the order upon each
successor; and

- (C) Maintain such records as will show
the name, title, and address of each
person upon whom the order has
been served, as described in
subparagraphs VII(A) and VII(B) of
this order, together with the date on
which service was made.

The obligations set forth in subparagraphs VII(B) and
VII(C) shall remain in effect until the Asserted
Patents expire.

VIII. Confidentiality

Any request for confidential treatment of
information obtained by the Commission pursuant to
section V - VI of this order should be made in
accordance with section 201.6 of the Commission's
Rules of Practice and Procedure (19 CFR 201.6). For
all reports for which confidential treatment is sought,
Respondent must provide a public version of such
report with confidential information redacted.

IX. Enforcement

Violation of this order may result in any of the
actions specified in section 210.75 of the Commission's
Rules of Practice and Procedure (19 CFR 210.75),
including an action for civil penalties under section
337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as
well as any other action that the Commission deems
appropriate. In determining whether Respondent is in
violation of this order, the Commission may infer facts

adverse to Respondent if it fails to provide adequate or timely information.

X.

Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.

Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 *Fed. Reg.* 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all

parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

By order of the Commission.

/s/ Lisa R. Barton

 Lisa R. Barton
 Secretary to the Commission

Issued: November 21, 2017

² See Footnote 1.

UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Cable Communications,
LLC, One Comcast Center, 1701 John F. Kennedy
Blvd., Philadelphia, Pennsylvania 19103
("Respondent"), cease and desist from conducting any
of the following activities in the United States:
importing, selling, offering for sale, leasing, offering
for lease, renting, offering for rent, marketing,
advertising, distributing, transferring (except for
exportation), and soliciting U.S. agents or distributors
for, certain digital video receivers and hardware and
software components thereof covered by (1) one or
more of claims 1, 2, 14, and 17 of U.S. Patent No.
8,006,263; or (2) one or more of claims 1, 3, 5, 9, 10, 14,
and 18 of U.S. Patent No. 8,578,413; ("the Asserted
Patents") in violation of section 337 of the Tariff Act of
1930, as amended (19 U.S.C. 1337).

I.
Definitions

As used in this order:

- (A) "Commission" shall mean the United
States International Trade
Commission.

- (B) “Complainants” shall mean Rovi Corporation and Rovi Guides, Inc., both of San Carlos, CA.
- (C) “Respondent” shall mean Comcast Cable Communications, LLC, One Comcast Center, 1701 John F. Kennedy Blvd., Philadelphia, Pennsylvania 19103.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids

liability for infringement of certain claims of the Asserted Patents.

II.

Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of, Respondent.

III.

Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order. For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after importation, rent after importation,

transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order. Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were

imported before the effective date of this Order.

**V.
Reporting**

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period. Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, <https://www.usitc.gov/>

secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001.

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must on the protective order entered in the investigation.

- (B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;
- (B) Serve, within fifteen days after the succession of any persons referred to

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in subparagraph VII(A) of this order,
a copy of the order upon each
successor; and

- (C) Maintain such records as will show
the name, title, and address of each
person upon whom the order has
been served, as described in
subparagraphs VII(A) and VII(B) of
this order, together with the date on
which service was made.

The obligations set forth in subparagraphs VII(B) and
VII(C) shall remain in effect until the Asserted
Patents expire.

VIII. Confidentiality

Any request for confidential treatment of
information obtained by the Commission pursuant to
section V - VI of this order should be made in
accordance with section 201.6 of the Commission's
Rules of Practice and Procedure (19 CFR 201.6). For
all reports for which confidential treatment is sought,
Respondent must provide a public version of such
report with confidential information redacted.

IX. Enforcement

Violation of this order may result in any of the
actions specified in section 210.75 of the Commission's
Rules of Practice and Procedure (19 CFR 210.75),
including an action for civil penalties under section
337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as
well as any other action that the Commission deems
appropriate. In determining whether Respondent is in
violation of this order, the Commission may infer facts

adverse to Respondent if it fails to provide adequate or timely information.

X.

Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.

Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed Reg. 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all

parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

By order of the Commission.

/s/ Lisa R. Barton

 Lisa R. Barton
 Secretary to the Commission

Issued: November 21, 2017

² See Footnote 1.

UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Cable Communications
Management, LLC, One Comcast Center, 1701 John
F. Kennedy Blvd., Philadelphia, Pennsylvania 19103
("Respondent"), cease and desist from conducting any
of the following activities in the United States:
importing, selling, offering for sale, leasing, offering
for lease, renting, offering for rent, marketing,
advertising, distributing, transferring (except for
exportation), and soliciting U.S. agents or distributors
for, certain digital video receivers and hardware and
software components thereof covered by (1) one or
more of claims 1, 2, 14, and 17 of U.S. Patent No.
8,006,263; or (2) one or more of claims 1, 3, 5, 9, 10, 14,
and 18 of U.S. Patent No. 8,578,413; ("the Asserted
Patents") in violation of section 337 of the Tariff Act of
1930, as amended (19 U.S.C. 1337).

I.
Definitions

As used in this order:

- (A) "Commission" shall mean the United
States International Trade
Commission.

- (B) “Complainants” shall mean Rovi Corporation and Rovi Guides, Inc., both of San Carlos, CA.
- (C) “Respondent” shall mean Comcast Cable Communications Management, LLC, One Comcast Center, 1701 John F. Kennedy Blvd., Philadelphia, Pennsylvania 19103.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids

liability for infringement of certain claims of the Asserted Patents.

II.

Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of, Respondent.

III.

Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order.

For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after

importation, rent after importation, transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order, Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were

imported before the effective date of this Order.

**V.
Reporting**

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period. Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, <https://www.usitc.gov/>

secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001.

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must be on the protective order entered in the investigation.

- (B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;
- (B) Serve, within fifteen days after the succession of any persons referred to

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in subparagraph VII(A) of this order,
a copy of the order upon each
successor; and

- (C) Maintain such records as will show
the name, title, and address of each
person upon whom the order has
been served, as described in
subparagraphs VII(A) and VII(B) of
this order, together with the date on
which service was made.

The obligations set forth in subparagraphs VII(B) and
VII(C) shall remain in effect until the Asserted
Patents expire.

VIII. Confidentiality

Any request for confidential treatment of
information obtained by the Commission pursuant to
section V - VI of this order should be made in
accordance with section 201.6 of the Commission's
Rules of Practice and Procedure (19 CFR 201.6). For
all reports for which confidential treatment is sought,
Respondent must provide a public version of such
report with confidential information redacted.

IX. Enforcement

Violation of this order may result in any of the
actions specified in section 210.75 of the Commission's
Rules of Practice and Procedure (19 CFR 210.75),
including an action for civil penalties under section
337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as
well as any other action that the Commission deems
appropriate. In determining whether Respondent is in
violation of this order, the Commission may infer facts

adverse to Respondent if it fails to provide adequate or timely information.

X.

Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.

Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed Reg. 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all

parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

By order of the Commission.

/s/ Lisa R. Barton

Lisa R. Barton

Secretary to the Commission

Issued: November 21, 2017

² See Footnote 1.

UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Corporation, One
Comcast Center, 1701 John F. Kennedy Blvd.,
Philadelphia, Pennsylvania 19103 (“Respondent”),
cease and desist from conducting any of the following
activities in the United States: importing, selling,
offering for sale, leasing, offering for lease, renting,
offering for rent, marketing, advertising, distributing,
transferring (except for exportation), and soliciting
U.S. agents or distributors for, certain digital video
receivers and hardware and software components
thereof covered by (1) one or more of claims 1, 2, 14,
and 17 of U.S. Patent No. 8,006,263; or (2) one or more
of claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No.
8,578,413; (“the Asserted Patents”) in violation of
section 337 of the Tariff Act of 1930, as amended (19
U.S.C. 1337).

I.
Definitions

As used in this order:

- (A) “Commission” shall mean the United
States International Trade
Commission.

- (B) “Complainants” shall mean Rovi Corporation and Rovi Guides, Inc., both of San Carlos, CA.
- (C) “Respondent” shall mean Comcast Corporation. One Comcast Center, 1701 John F. Kennedy Blvd., Philadelphia, Pennsylvania 19103.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids

liability for infringement of certain claims of the Asserted Patents.

II.

Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of Respondent.

III.

Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order.

For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after

importation, rent after importation, transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order, Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were

imported before the effective date of this Order.

**V.
Reporting**

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period. Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, <https://www.usitc.gov/>

secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001.

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must on the protective order entered in the investigation.

- (B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;
- (B) Serve, within fifteen days after the succession of any persons referred to

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in subparagraph VII(A) of this order,
a copy of the order upon each
successor; and

- (C) Maintain such records as will show
the name, title, and address of each
person upon whom the order has
been served, as described in
subparagraphs VII(A) and VII(B) of
this order, together with the date on
which service was made.

The obligations set forth in subparagraphs VII(B) and
VII(C) shall remain in effect until the Asserted
Patents expire.

VIII. Confidentiality

Any request for confidential treatment of
information obtained by the Commission pursuant to
section V - VI of this order should be made in
accordance with section 201.6 of the Commission's
Rules of Practice and Procedure (19 CFR 201.6). For
all reports for which confidential treatment is sought.
Respondent must provide a public version of such
report with confidential information redacted.

IX. Enforcement

Violation of this order may result in any of the
actions specified in section 210.75 of the Commission's
Rules of Practice and Procedure (19 CFR 210.75),
including an action for civil penalties under section
337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as
well as any other action that the Commission deems
appropriate. In determining whether Respondent is in
violation of this order, the Commission may infer facts

adverse to Respondent if it fails to provide adequate or timely information.

X.

Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.

Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed. Reg. 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all

parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

By order of the Commission.

/s/ Lisa R. Barton

Lisa R. Barton

Secretary to the Commission

Issued: November 21, 2017

² See Footnote 1.

UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Holdings Corporation,
One Comcast Center, 1701 John F. Kennedy Blvd.,
Philadelphia, Pennsylvania 19103 (“Respondent”),
cease and desist from conducting any of the following
activities in the United States: importing, selling,
offering for sale, leasing, offering for lease, renting,
offering for rent, marketing, advertising, distributing,
transferring (except for exportation), and soliciting
U.S. agents or distributors for, certain digital video
receivers and hardware and software components
thereof covered by (1) one or more of claims 1, 2, 14,
and 17 of U.S. Patent No. 8,006,263; or (2) one or more
of claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No.
8,578,413; (“the Asserted Patents”) in violation of
section 337 of the Tariff Act of 1930, as amended (19
U.S.C. 1337).

I.
Definitions

As used in this order:

- (A) “Commission” shall mean the United
States International Trade
Commission.

- (B) “Complainants” shall mean Rovi Corporation and Rovi Guides, Inc., both of San Carlos, CA.
- (C) “Respondent” shall mean Comcast Holdings Corporation, One Comcast Center, 1701 John F. Kennedy Blvd., Philadelphia, Pennsylvania 19103.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids

liability for infringement of certain claims of the Asserted Patents.

II.

Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of, Respondent.

III.

Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order.

For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after

importation, rent after importation, transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order, Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were

imported before the effective date of this Order.

**V.
Reporting**

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, <https://www.usitc.gov/>

secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹ Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order. Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must be on the protective order entered in the investigation.

designated attorney must be on the protective order entered in the investigation, summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

- (B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any

responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;

- (B) Serve, within fifteen days after the succession of any persons referred to in subparagraph VII(A) of this order, a copy of the order upon each successor; and
- (C) Maintain such records as will show the name, title, and address of each person upon whom the order has been served, as described in subparagraphs VII(A) and VII(B) of this order, together with the date on which service was made.

The obligations set forth in subparagraphs VII(B) and VII(C) shall remain in effect until the Asserted Patents expire.

VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to section V - VI of this order should be made in accordance with section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). For all reports for which confidential treatment is sought, Respondent must provide a public version of such report with confidential information redacted.

IX.
Enforcement

Violation of this order may result in any of the actions specified in section 210.75 of the Commission's Rules of Practice and Procedure (19 CFR 210.75), including an action for civil penalties under section 337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as well as any other action that the Commission deems appropriate. In determining whether Respondent is in violation of this order, the Commission may infer facts adverse to Respondent if it fails to provide adequate or timely information.

X.
Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.
Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed. Reg. 43,251 (Jul. 21,2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

² *See* Footnote 1.

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By order of the Commission.

/s/ Lisa R. Barton

Lisa R. Barton

Secretary to the Commission

Issued: November 21, 2017

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UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT
RESPONDENT Comcast Shared Services, LLC,
330 N. Wabash Ave. 22, Chicago, IL 60611-3586
("Respondent"), cease and desist from conducting any
of the following activities in the United States:
importing, selling, offering for sale, leasing, offering
for lease, renting, offering for rent, marketing,
advertising, distributing, transferring (except for
exportation), and soliciting U.S. agents or distributors
for, certain digital video receivers and hardware and
software components thereof covered by (1) one or
more of claims 1, 2, 14, and 17 of U.S. Patent No.
8,006,263; or (2) one or more of claims 1, 3, 5, 9, 10, 14,
and 18 of U.S. Patent No. 8,578,413; ("the Asserted
Patents") in violation of section 337 of the Tariff Act of
1930, as amended (19 U.S.C. 1337).

I.

Definitions

As used in this order:

- (A) "Commission" shall mean the United
States International Trade
Commission.
- (B) "Complainants" shall mean Rovi
Corporation and Rovi Guides, Inc.,
both of San Carlos, CA.

- (C) “Respondent” shall mean Comcast Shared Services, LLC, 330 N. Wabash Ave. 22, Chicago, IL 60611-3586.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority owned or controlled subsidiaries, successors, or assigns.
- (E) “United States” shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term “covered products” shall mean digital video receivers and hardware and software components thereof covered by one or more of (1) claims 1, 2, 14, and 17 of U.S. Patent No. 8,006,263; or (2) claims 1, 3, 5, 9, 10, 14, and 18 of U.S. Patent No. 8,578,413. Covered products shall not include articles for which a provision of law or license avoids liability for infringement of certain claims of the Asserted Patents.

II.
Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them insofar as they are engaging in conduct prohibited by section III, infra, for, with, or otherwise on behalf of, Respondent.

III.
Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order.

For the remaining terms of the Asserted Patents, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, sell, offer to sell, lease, offer to lease, rent, offer to rent, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease after importation, rent after importation, transfer, or distribution of covered products.

**IV.
Conduct Permitted**

Notwithstanding any other provision of this Order, Respondent shall be permitted:

- (A) to engage in specific conduct otherwise prohibited by the terms of this Order if, in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct, including but not limited to conduct involving covered products that the Commission found were previously imported into the United States under license;
- (B) to engage in specific conduct otherwise prohibited by the terms of this Order if such specific conduct is related to the importation or sale of covered products by or for the United States; or
- (C) to engage in such specific conduct related to service or repair articles imported for use in servicing or repairing digital video receivers that were imported before the effective date of this Order. Exception (C) does not permit the importation of digital video receivers to replace digital video receivers that were imported before the effective date of this Order.

V.
Reporting

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this order through December 31, 2017. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory (whether held in warehouses or at customer sites) of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period. When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (8) true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1001") in a prominent place on the cover pages and/or the first page. (See Handbook for Electronic Filing Procedures, https://www.usitc.gov/secretary/documents/handbook_on_filing_procedures.pdf). Persons with questions regarding filing

should contact the Office of the Secretary (202-205-2000). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. 1001.

VI.

Recordkeeping and Inspection

- (A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, lease, offer to lease, rent, offer to rent, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.
- (B) For the purposes of determining or securing compliance with this Order

¹ Complainants must file a letter with the Secretary identifying the attorney to receive reports associated with this order. The designated attorney must be on the protective order entered in the investigation.

and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent's principal office during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII.

Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the importation, marketing, distribution, sale, lease, or rent of imported covered products in the United States;
- (B) Serve, within fifteen days after the succession of any persons referred to in subparagraph VII(A) of this order,

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a copy of the order upon each successor; and

- (C) Maintain such records as will show the name, title, and address of each person upon whom the order has been served, as described in subparagraphs VII(A) and VII(B) of this order, together with the date on which service was made.

The obligations set forth in subparagraphs VII(B) and VII(C) shall remain in effect until the Asserted Patents expire.

VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to section V - VI of this order should be made in accordance with section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). For all reports for which confidential treatment is sought. Respondent must provide a public version of such report with confidential information redacted.

IX. Enforcement

Violation of this order may result in any of the actions specified in section 210.75 of the Commission's Rules of Practice and Procedure (19 CFR 210.75), including an action for civil penalties under section 337(f) of the Tariff Act of 1930 (19 U.S.C. 1337(f)), as well as any other action that the Commission deems appropriate. In determining whether Respondent is in violation of this order, the Commission may infer facts

adverse to Respondent if it fails to provide adequate or timely information.

X.

Modification

The Commission may amend this order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).

XI.

Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty-day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed. Reg. 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of zero percent of the entered value of the covered products (*i.e.*, no bond). This bond provision does not apply to conduct that is otherwise permitted by section IV of this order. Covered products imported on or after the date of issuance of this order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 CFR 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all

parties, and (b) Respondent must serve a copy of the bond and any accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or unless Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

The bond is to be released in the event the United States Trade Representative disapproves this order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

By order of the Commission.

/s/ Lisa R. Barton

Lisa R. Barton

Secretary to the Commission

Issued: November 21, 2017

² See Footnote 1.

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UNITED STATES INTERNATIONAL TRADE
COMMISSION

Investigation No. 337-TA-1001

In the Matter of CERTAIN DIGITAL VIDEO
RECEIVERS AND HARDWARE AND SOFTWARE
COMPONENTS THEREOF

LIMITED EXCLUSION ORDER

The Commission has determined that there is a violation of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), in the unlawful importation, sale for importation, and/or sale after importation by respondents Comcast Corporation; Comcast Cable Communications, LLC; Comcast Cable Communications Management, LLC; Comcast Business Communications, LLC; Comcast Holdings Corporation; and Comcast Shared Services, LLC (collectively “Respondents”) of certain digital video receivers and hardware and software components thereof covered by one or more of claims 1, 2, 14, and 17 of United States Patent No. 8,006,263 or one or more of claims 1, 3, 5, 9, 10, 14, and 18 of United States Patent No. 8,578,413.

Having reviewed the record of this investigation, including the written submissions of the parties, the Commission has made its determination on the issues of remedy, public interest, and bonding. The Commission has determined that the appropriate form of relief is a limited exclusion order prohibiting the unlicensed entry into the United States of covered digital video receivers and hardware and software components thereof manufactured by or on behalf of the Respondents or any of their affiliated companies,

parents, subsidiaries, or other related business entities, or their successors or assigns.

The Commission has also determined that the public interest factors enumerated in 19 U.S.C. 1337(d) do not preclude the issuance of the limited exclusion order, and that the bond during the Presidential review period shall be in the amount of zero percent of the entered value of the infringing goods (*i.e.*, no bond).

Accordingly, the Commission hereby ORDERS that:

1. Digital video receivers and hardware and software components thereof that infringe one or more of claims 1, 2, 14, and 17 of United States Patent No. 8,006,263 or one or more of claims 1, 3, 5, 9, 10, 14, and 18 of United States Patent No. 8,578,413 that are manufactured by, or on behalf of, or are imported by or on behalf of the Respondents or any of their affiliated companies, parents, subsidiaries, agents, or other related business entities, or their successors or assigns, including ARRIS and Technicolor¹ to the extent they import such products on behalf of Respondents, are excluded from entry for consumption into the United States, entry for consumption from a foreign-trade zone, or withdrawal from a warehouse for consumption, for the remaining terms of U.S. Patent Nos.

¹ ARRIS and Technicolor refer to Technicolor SA; Technicolor USA, Inc.; Technicolor Connected Home USA LLC; ARRIS International Inc.; ARRIS Group Inc.; ARRIS Technology, Inc.; ARRIS Enterprises LLC; ARRIS Solutions, Inc.; ARRIS Global Ltd.; and Pace Americas; or any of their affiliated companies, parents, subsidiaries, agents, or other related business entities, or their successors or assigns.

8,006,263 and 8,578,413, except under license of the patent owner or as provided by law, and except for service or repair of digital video receivers that were imported before the effective date of this order.

2. Notwithstanding paragraph 1 of this Order, the aforesaid digital video receivers and hardware and software components thereof are entitled to entry into the United States for consumption, entry for consumption from a foreign trade zone, or withdrawal from a warehouse for consumption, under bond in the amount of zero percent of the entered value (*i.e.*, no bond) of the imported digital video receivers and hardware and software components thereof pursuant to subsection (j) of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337(j)), and the Presidential Memorandum for the United States Trade Representative of July 21, 2005, (70 FR 43251), from the day after this Order is received by the United States Trade Representative, and until such time as the United States Trade representative notifies the Commission that this action is approved or disapproved but, in any event, not later than sixty (60) days after the issuance of receipt of this action.
3. At the discretion of U.S. Customs and Border Protection ("CBP") and pursuant to the procedures it establishes, persons seeking to import digital video receivers and hardware and software components thereof that are potentially subject to this Order may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and thereupon state that, to the best of their

knowledge and belief, the products being imported are not capable of being used after importation in a manner which infringes the claims of the patents that are the subject of this Order because one or more elements (such as software elements) of the internet communications path described by the claims of the patents in paragraph 1 of this Order are omitted from the internet communications path that the imported products will use after importation. At its discretion, CBP may require persons who have provided the certification described in this paragraph to furnish such records or analyses as are necessary to substantiate this certification.

4. In accordance with 19 U.S.C. 1337 (1), the provisions of this Order shall not apply to infringing digital video receivers and hardware and software components thereof that are imported by or for the use of the United States, or imported for and to be used for, the United States with the authorization or consent of the Government.
5. The Commission may modify this Order in accordance with the procedures described in Rule 210.76 of the Commission's Rules of Practice and Procedure (19 CFR 210.76).
6. The Secretary shall serve copies of this Order upon each party of record in this Investigation and upon CBP.
7. Notice of this Order shall be published in the *Federal Register*.

By order of the Commission.

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/s/ Lisa R. Barton
Lisa R. Barton
Secretary to the Commission

Issued: November 21, 2017

[CERTIFICATE OF SERVICE OMITTED]

APPENDIX E

STATUTORY PROVISIONS

1. 19 U.S.C.A. § 1337 provides:

Unfair practices in import trade

(a) Unlawful activities; covered industries; definitions

(1) Subject to paragraph (2), the following are unlawful, and when found by the Commission to exist shall be dealt with, in addition to any other provision of law, as provided in this section:

(A) Unfair methods of competition and unfair acts in the importation of articles (other than articles provided for in subparagraphs (B), (C), (D), and (E)) into the United States, or in the sale of such articles by the owner, importer, or consignee, the threat or effect of which is--

(i) to destroy or substantially injure an industry in the United States;

(ii) to prevent the establishment of such an industry; or

(iii) to restrain or monopolize trade and commerce in the United States.

(B) The importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that--

(i) infringe a valid and enforceable United States patent or a valid and enforceable United States copyright registered under Title 17; or

(ii) are made, produced, processed, or mined under, or by means of, a process covered by the claims of a valid and enforceable United States patent.

(C) The importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that infringe a valid and enforceable United States trademark registered under the Trademark Act of 1946.

(D) The importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of a semiconductor chip product in a manner that constitutes infringement of a mask work registered under chapter 9 of Title 17.

(E) The importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consigner, of an article that constitutes infringement of the exclusive rights in a design protected under chapter 13 of Title 17.

(2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if

there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned--

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital;
or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.

(4) For the purposes of this section, the phrase "owner, importer, or consignee" includes any agent of the owner, importer, or consignee.

(b) Investigation of violations by Commission

(1) The Commission shall investigate any alleged violation of this section on complaint under oath or upon its initiative. Upon commencing any such investigation, the Commission shall publish notice thereof in the Federal Register. The Commission shall conclude any such investigation and make its determination under this section at the earliest practicable time after the date of publication of notice of such investigation. To promote expeditious adjudication, the Commission shall, within 45 days after an investigation is initiated, establish a target date for its final determination.

(2) During the course of each investigation under this section, the Commission shall consult with, and seek advice and information from, the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and such other departments and

agencies as it considers appropriate.

(3) Whenever, in the course of an investigation under this section, the Commission has reason to believe, based on information before it, that a matter, in whole or in part, may come within the purview of part II of subtitle IV of this chapter, it shall promptly notify the Secretary of Commerce so that such action may be taken as is otherwise authorized by such part II. If the Commission has reason to believe that the matter before it (A) is based solely on alleged acts and effects which are within the purview of section 1671 or 1673 of this title, or (B) relates to an alleged copyright infringement with respect to which action is prohibited by section 1008 of Title 17, the Commission shall terminate, or not institute, any investigation into the matter. If the Commission has reason to believe the matter before it is based in part on alleged acts and effects which are within the purview of section 1671 or 1673 of this title, and in part on alleged acts and effects which may, independently from or in conjunction with those within the purview of such section, establish a basis for relief under this section, then it may institute or continue an investigation into the matter. If the Commission notifies the Secretary or the administering authority (as defined in section 1677(1) of this title) with respect to a matter under this paragraph, the Commission may suspend its investigation during the time the matter is before the Secretary or administering authority for final decision. Any final decision by the administering authority under section 1671 or 1673 of this title with respect to the matter within such section 1671 or 1673 of this title of which the

Commission has notified the Secretary or administering authority shall be conclusive upon the Commission with respect to the issue of less-than-fair-value sales or subsidization and the matters necessary for such decision.

(c) Determinations; review

The Commission shall determine, with respect to each investigation conducted by it under this section, whether or not there is a violation of this section, except that the Commission may, by issuing a consent order or on the basis of an agreement between the private parties to the investigation, including an agreement to present the matter for arbitration, terminate any such investigation, in whole or in part, without making such a determination. Each determination under subsection (d) or (e) shall be made on the record after notice and opportunity for a hearing in conformity with the provisions of subchapter II of chapter 5 of Title 5. All legal and equitable defenses may be presented in all cases. A respondent may raise any counterclaim in a manner prescribed by the Commission. Immediately after a counterclaim is received by the Commission, the respondent raising such counterclaim shall file a notice of removal with a United States district court in which venue for any of the counterclaims raised by the party would exist under section 1391 of Title 28. Any counterclaim raised pursuant to this section shall relate back to the date of the original complaint in the proceeding before the Commission. Action on such counterclaim shall not delay or affect the proceeding under this section, including the legal and equitable defenses that may be raised under this subsection. Any person adversely affected by a final determination of the Commission under subsection

(d), (e), (f), or (g) may appeal such determination, within 60 days after the determination becomes final, to the United States Court of Appeals for the Federal Circuit for review in accordance with chapter 7 of Title 5. Notwithstanding the foregoing provisions of this subsection, Commission determinations under subsections (d), (e), (f), and (g) with respect to its findings on the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, the amount and nature of bond, or the appropriate remedy shall be reviewable in accordance with section 706 of Title 5. Determinations by the Commission under subsections (e), (f), and (j) with respect to forfeiture of bonds and under subsection (h) with respect to the imposition of sanctions for abuse of discovery or abuse of process shall also be reviewable in accordance with section 706 of Title 5.

(d) Exclusion of articles from entry

(1) If the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry. The Commission shall notify the Secretary of the Treasury of its action under this subsection

directing such exclusion from entry, and upon receipt of such notice, the Secretary shall, through the proper officers, refuse such entry.

(2) The authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that--

(A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons; or

(B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products.

(e) Exclusion of articles from entry during investigation except under bond; procedures applicable; preliminary relief

(1) If, during the course of an investigation under this section, the Commission determines that there is reason to believe that there is a violation of this section, it may direct that the articles concerned, imported by any person with respect to whom there is reason to believe that such person is violating this section, be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry. The Commission shall notify the Secretary of the

Treasury of its action under this subsection directing such exclusion from entry, and upon receipt of such notice, the Secretary shall, through the proper officers, refuse such entry, except that such articles shall be entitled to entry under bond prescribed by the Secretary in an amount determined by the Commission to be sufficient to protect the complainant from any injury. If the Commission later determines that the respondent has violated the provisions of this section, the bond may be forfeited to the complainant.

(2) A complainant may petition the Commission for the issuance of an order under this subsection. The Commission shall make a determination with regard to such petition by no later than the 90th day after the date on which the Commission's notice of investigation is published in the Federal Register. The Commission may extend the 90-day period for an additional 60 days in a case it designates as a more complicated case. The Commission shall publish in the Federal Register its reasons why it designated the case as being more complicated. The Commission may require the complainant to post a bond as a prerequisite to the issuance of an order under this subsection. If the Commission later determines that the respondent has not violated the provisions of this section, the bond may be forfeited to the respondent.

(3) The Commission may grant preliminary relief under this subsection or subsection (f) to the same extent as preliminary injunctions and temporary restraining orders may be granted under the Federal Rules of Civil Procedure.

(4) The Commission shall prescribe the terms and conditions under which bonds may be forfeited under paragraphs (1) and (2).

(f) Cease and desist orders; civil penalty for violation of orders

(1) In addition to, or in lieu of, taking action under subsection (d) or (e), the Commission may issue and cause to be served on any person violating this section, or believed to be violating this section, as the case may be, an order directing such person to cease and desist from engaging in the unfair methods or acts involved, unless after considering the effect of such order upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such order should not be issued. The Commission may at any time, upon such notice and in such manner as it deems proper, modify or revoke any such order, and, in the case of a revocation, may take action under subsection (d) or (e), as the case may be. If a temporary cease and desist order is issued in addition to, or in lieu of, an exclusion order under subsection (e), the Commission may require the complainant to post a bond, in an amount determined by the Commission to be sufficient to protect the respondent from any injury, as a prerequisite to the issuance of an order under this subsection. If the Commission later determines that the respondent has not violated the provisions of this section, the bond may be forfeited to the respondent. The Commission shall prescribe the terms and

conditions under which the bonds may be forfeited under this paragraph.

(2) Any person who violates an order issued by the Commission under paragraph (1) after it has become final shall forfeit and pay to the United States a civil penalty for each day on which an importation of articles, or their sale, occurs in violation of the order of not more than the greater of \$100,000 or twice the domestic value of the articles entered or sold on such day in violation of the order. Such penalty shall accrue to the United States and may be recovered for the United States in a civil action brought by the Commission in the Federal District Court for the District of Columbia or for the district in which the violation occurs. In such actions, the United States district courts may issue mandatory injunctions incorporating the relief sought by the Commission as they deem appropriate in the enforcement of such final orders of the Commission.

(g) Exclusion from entry or cease and desist order; conditions and procedures applicable

(1) If--

(A) a complaint is filed against a person under this section;

(B) the complaint and a notice of investigation are served on the person;

(C) the person fails to respond to the complaint and notice or otherwise fails to appear to answer the complaint and notice;

(D) the person fails to show good cause why the person should not be found in default; and

(E) the complainant seeks relief limited solely to that person;

the Commission shall presume the facts alleged in the complaint to be true and shall, upon request, issue an exclusion from entry or a cease and desist order, or both, limited to that person unless, after considering the effect of such exclusion or order upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, the Commission finds that such exclusion or order should not be issued.

(2) In addition to the authority of the Commission to issue a general exclusion from entry of articles when a respondent appears to contest an investigation concerning a violation of the provisions of this section, a general exclusion from entry of articles, regardless of the source or importer of the articles, may be issued if--

(A) no person appears to contest an investigation concerning a violation of the provisions of this section,

(B) such a violation is established by substantial, reliable, and probative evidence, and

(C) the requirements of subsection (d)(2) are met.

(h) Sanctions for abuse of discovery and abuse of process

The Commission may by rule prescribe sanctions for abuse of discovery and abuse of process to the extent

authorized by Rule 11 and Rule 37 of the Federal Rules of Civil Procedure.

(i) Forfeiture

(1) In addition to taking action under subsection (d), the Commission may issue an order providing that any article imported in violation of the provisions of this section be seized and forfeited to the United States if--

(A) the owner, importer, or consignee of the article previously attempted to import the article into the United States;

(B) the article was previously denied entry into the United States by reason of an order issued under subsection (d); and

(C) upon such previous denial of entry, the Secretary of the Treasury provided the owner, importer, or consignee of the article written notice of--

(i) such order, and

(ii) the seizure and forfeiture that would result from any further attempt to import the article into the United States.

(2) The Commission shall notify the Secretary of the Treasury of any order issued under this subsection and, upon receipt of such notice, the Secretary of the Treasury shall enforce such order in accordance with the provisions of this section.

(3) Upon the attempted entry of articles subject to an order issued under this subsection, the Secretary of the Treasury shall immediately notify all ports of entry of the attempted importation and

shall identify the persons notified under paragraph (1)(C).

(4) The Secretary of the Treasury shall provide--

(A) the written notice described in paragraph (1)(C) to the owner, importer, or consignee of any article that is denied entry into the United States by reason of an order issued under subsection (d); and

(B) a copy of such written notice to the Commission.

(j) Referral to President

(1) If the Commission determines that there is a violation of this section, or that, for purposes of subsection (e), there is reason to believe that there is such a violation, it shall--

(A) publish such determination in the Federal Register, and

(B) transmit to the President a copy of such determination and the action taken under subsection (d), (e), (f), (g), or (i), with respect thereto, together with the record upon which such determination is based.

(2) If, before the close of the 60-day period beginning on the day after the day on which he receives a copy of such determination, the President, for policy reasons, disapproves such determination and notifies the Commission of his disapproval, then, effective on the date of such notice, such determination and the action taken under subsection (d), (e), (f), (g), or (i) with respect thereto shall have no force or effect.

(3) Subject to the provisions of paragraph (2), such determination shall, except for purposes of subsection (c), be effective upon publication thereof in the Federal Register, and the action taken under subsection (d), (e), (f), (g), or (i), with respect thereto shall be effective as provided in such subsections, except that articles directed to be excluded from entry under subsection (d) or subject to a cease and desist order under subsection (f) shall, until such determination becomes final, be entitled to entry under bond prescribed by the Secretary in an amount determined by the Commission to be sufficient to protect the complainant from any injury. If the determination becomes final, the bond may be forfeited to the complainant. The Commission shall prescribe the terms and conditions under which bonds may be forfeited under this paragraph.

(4) If the President does not disapprove such determination within such 60-day period, or if he notifies the Commission before the close of such period that he approves such determination, then, for purposes of paragraph (3) and subsection (c) such determination shall become final on the day after the close of such period or the day on which the President notifies the Commission of his approval, as the case may be.

(k) Period of effectiveness; termination of violation or modification or rescission of exclusion or order

(1) Except as provided in subsections (f) and (j), any exclusion from entry or order under this section shall continue in effect until the

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Commission finds, and in the case of exclusion from entry notifies the Secretary of the Treasury, that the conditions which led to such exclusion from entry or order no longer exist.

(2) If any person who has previously been found by the Commission to be in violation of this section petitions the Commission for a determination that the petitioner is no longer in violation of this section or for a modification or rescission of an exclusion from entry or order under subsection (d), (e), (f), (g), or (i)--

(A) the burden of proof in any proceeding before the Commission regarding such petition shall be on the petitioner; and

(B) relief may be granted by the Commission with respect to such petition--

(i) on the basis of new evidence or evidence that could not have been presented at the prior proceeding, or

(ii) on grounds which would permit relief from a judgment or order under the Federal Rules of Civil Procedure.

(l) Importation by or for United States

Any exclusion from entry or order under subsection (d), (e), (f), (g), or (i), in cases based on a proceeding involving a patent, copyright, mask work, or design under subsection (a)(1), shall not apply to any articles imported by and for the use of the United States, or imported for, and to be used for, the United States with the authorization or consent of the Government. Whenever any article would have been excluded from entry or would not have been entered pursuant to the

provisions of such subsections but for the operation of this subsection, an owner of the patent, copyright, mask work, or design adversely affected shall be entitled to reasonable and entire compensation in an action before the United States Court of Federal Claims pursuant to the procedures of section 1498 of Title 28.

(m) “United States” defined

For purposes of this section and sections 1338 and 1340 of this title, the term “United States” means the customs territory of the United States as defined in general note 2 of the Harmonized Tariff Schedule of the United States.

(n) Disclosure of confidential information

(1) Information submitted to the Commission or exchanged among the parties in connection with proceedings under this section which is properly designated as confidential pursuant to Commission rules may not be disclosed (except under a protective order issued under regulations of the Commission which authorizes limited disclosure of such information) to any person (other than a person described in paragraph (2)) without the consent of the person submitting it.

(2) Notwithstanding the prohibition contained in paragraph (1), information referred to in that paragraph may be disclosed to--

(A) an officer or employee of the Commission who is directly concerned with--

(i) carrying out the investigation or related proceeding in connection with which the information is submitted,

(ii) the administration of a bond posted pursuant to subsection (e), (f), or (j),

(iii) the administration or enforcement of an exclusion order issued pursuant to subsection (d), (e), or (g), a cease and desist order issued pursuant to subsection (f), or a consent order issued pursuant to subsection (c),

(iv) proceedings for the modification or rescission of a temporary or permanent order issued under subsection (d), (e), (f), (g), or (i), or a consent order issued under this section, or

(v) maintaining the administrative record of the investigation or related proceeding,

(B) an officer or employee of the United States Government who is directly involved in the review under subsection (j), or

(C) an officer or employee of the United States Customs Service who is directly involved in administering an exclusion from entry under subsection (d), (e), or (g) resulting from the investigation or related proceeding in connection with which the information is submitted.

2. 35 U.S.C.A. § 271 provides:

Infringement of patent

(a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United

States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

(b) Whoever actively induces infringement of a patent shall be liable as an infringer.

(c) Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

(d) No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement; (4) refused to license or use any rights to the patent; or (5) conditioned the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent

owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned.

(e)(1) It shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention (other than a new animal drug or veterinary biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act and the Act of March 4, 1913) which is primarily manufactured using recombinant DNA, recombinant RNA, hybridoma technology, or other processes involving site specific genetic manipulation techniques) solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs or veterinary biological products.

(2) It shall be an act of infringement to submit--

(A) an application under section 505(j) of the Federal Food, Drug, and Cosmetic Act or described in section 505(b)(2) of such Act for a drug claimed in a patent or the use of which is claimed in a patent,

(B) an application under section 512 of such Act or under the Act of March 4, 1913 (21 U.S.C. 151-158) for a drug or veterinary biological product which is not primarily manufactured using recombinant DNA, recombinant RNA, hybridoma technology, or other processes involving site specific genetic manipulation techniques and which is claimed in a patent or the use of which is claimed in a patent, or

(C)(i) with respect to a patent that is identified in the list of patents described in section 351(l)(3) of the Public Health Service Act (including as provided under section 351(l)(7) of such Act), an application seeking approval of a biological product, or

(ii) if the applicant for the application fails to provide the application and information required under section 351(l)(2)(A) of such Act, an application seeking approval of a biological product for a patent that could be identified pursuant to section 351(l)(3)(A)(i) of such Act,

if the purpose of such submission is to obtain approval under such Act to engage in the commercial manufacture, use, or sale of a drug, veterinary biological product, or biological product claimed in a patent or the use of which is claimed in a patent before the expiration of such patent.

(3) In any action for patent infringement brought under this section, no injunctive or other relief may be granted which would prohibit the making, using, offering to sell, or selling within the United States or importing into the United States of a patented invention under paragraph (1).

(4) For an act of infringement described in paragraph (2)--

(A) the court shall order the effective date of any approval of the drug or veterinary biological product involved in the infringement to be a date which is not earlier than the date of the expiration of the patent which has been infringed,

(B) injunctive relief may be granted against an infringer to prevent the commercial manufacture, use, offer to sell, or sale within the United States or importation into the United States of an approved drug, veterinary biological product, or biological product,

(C) damages or other monetary relief may be awarded against an infringer only if there has been commercial manufacture, use, offer to sell, or sale within the United States or importation into the United States of an approved drug, veterinary biological product, or biological product, and

(D) the court shall order a permanent injunction prohibiting any infringement of the patent by the biological product involved in the infringement until a date which is not earlier than the date of the expiration of the patent that has been infringed under paragraph (2)(C), provided the patent is the subject of a final court decision, as defined in section 351(k)(6) of the Public Health Service Act, in an action for infringement of the patent under section 351(l)(6) of such Act, and the biological product has not yet been approved because of section 351(k)(7) of such Act.

The remedies prescribed by subparagraphs (A), (B), (C), and (D) are the only remedies which may be granted by a court for an act of infringement described in paragraph (2), except that a court may award attorney fees under section 285.

(5) Where a person has filed an application described in paragraph (2) that includes a certification under subsection (b)(2)(A)(iv) or

(j)(2)(A)(vii)(IV) of section 505 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355), and neither the owner of the patent that is the subject of the certification nor the holder of the approved application under subsection (b) of such section for the drug that is claimed by the patent or a use of which is claimed by the patent brought an action for infringement of such patent before the expiration of 45 days after the date on which the notice given under subsection (b)(3) or (j)(2)(B) of such section was received, the courts of the United States shall, to the extent consistent with the Constitution, have subject matter jurisdiction in any action brought by such person under section 2201 of title 28 for a declaratory judgment that such patent is invalid or not infringed.

(6)(A) Subparagraph (B) applies, in lieu of paragraph (4), in the case of a patent--

(i) that is identified, as applicable, in the list of patents described in section 351(l)(4) of the Public Health Service Act or the lists of patents described in section 351(l)(5)(B) of such Act with respect to a biological product; and

(ii) for which an action for infringement of the patent with respect to the biological product--

(I) was brought after the expiration of the 30-day period described in subparagraph (A) or (B), as applicable, of section 351(l)(6) of such Act; or

(II) was brought before the expiration of the 30-day period described in subclause

(I), but which was dismissed without prejudice or was not prosecuted to judgment in good faith.

(B) In an action for infringement of a patent described in subparagraph (A), the sole and exclusive remedy that may be granted by a court, upon a finding that the making, using, offering to sell, selling, or importation into the United States of the biological product that is the subject of the action infringed the patent, shall be a reasonable royalty.

(C) The owner of a patent that should have been included in the list described in section 351(l)(3)(A) of the Public Health Service Act, including as provided under section 351(l)(7) of such Act for a biological product, but was not timely included in such list, may not bring an action under this section for infringement of the patent with respect to the biological product.

(f)(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or

commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

(g) Whoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent. In an action for infringement of a process patent, no remedy may be granted for infringement on account of the noncommercial use or retail sale of a product unless there is no adequate remedy under this title for infringement on account of the importation or other use, offer to sell, or sale of that product. A product which is made by a patented process will, for purposes of this title, not be considered to be so made after--

(1) it is materially changed by subsequent processes; or

(2) it becomes a trivial and nonessential component of another product.

(h) As used in this section, the term "whoever" includes any State, any instrumentality of a State, and any officer or employee of a State or instrumentality of a State acting in his official capacity. Any State, and any such instrumentality, officer, or employee, shall be subject to the provisions

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of this title in the same manner and to the same extent as any nongovernmental entity.

(i) As used in this section, an “offer for sale” or an “offer to sell” by a person other than the patentee, or any designee of the patentee, is that in which the sale will occur before the expiration of the term of the patent.