

RECORD OF ORAL HEARING
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RPX CORPORATION

Petitioner

vs.

CHANBOND LLC

Patent Owner

Case IPR2016-00234
Patent 7,942,822 B2

Oral Hearing Held: January 30, 2017

Before: JONI Y. CHANG, JENNIFER S. BISK and
JACQUELINE T. HARLOW (via video), Administrative Patent Judges

The above-entitled matter came on for hearing on Monday,
January 30, 2017 at the U.S. Patent and Trademark Office, 600 Dulany
Street, Alexandria, Virginia in Courtroom B, at 1:00 p.m.

APPEARANCES:

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P R O C E E D I N G S

(1:00 p.m.)

JUDGE HARLOW: Good afternoon. We will hear argument now in Case IPR2016-00234, RPX Corporation versus ChanBond LLC concerning U.S. patent 7,941,822 B2.

At this time we would like counsel for the parties to please introduce yourselves and any colleagues, beginning with Petitioner.

MR. ABRAHAMSEN: Robert Abrahamsen on behalf of RPX Corporation. And with me is Andrew Tibbetts. He will not be playing a speaking role but will be assisting me.

MR. FAHMI: Good afternoon, Your Honors, Tarek Fahmi on behalf of the Patent Owner.

JUDGE HARLOW: Thank you all and welcome to the Board.

Consistent with our previous order, each party will have 45 minutes to present its arguments today. Petitioner will proceed first to present its case as to the challenged claims and may reserve rebuttal time.

Thereafter, Patent Owner will respond to Petitioner's case. Any subsequent rebuttal by Petitioner must be confined to subject matter expressly addressed during the

1 Patent Owner's arguments. We remind the parties that the
2 Petitioner bears the burden of proving any proposition of
3 unpatentability by a preponderance of the evidence. We also
4 remind the parties that this hearing is open to the public and a
5 full transcript will become part of the record.

6 For clarity of the record and because I'm
7 participating in this hearing remotely by video link and cannot
8 see the demonstratives that are displayed in the hearing room
9 in Alexandria, please remember to identify any slides you
10 discuss by the slide number included on the demonstratives you
11 filed with the Board.

12 With that, I will invite counsel for Petitioner to
13 begin. And please let us know if you would like to reserve any
14 time.

15 MR. ABRAHAMSEN: Thank you, Judge Harlow.
16 Good morning. Good afternoon, Judge Chang and Bisk.

17 Robert Abrahamsen on behalf of RPX Corporation.
18 I would like to reserve about 15 minutes, thereabouts, for
19 rebuttal time.

20 JUDGE HARLOW: Thank you.

21 JUDGE CHANG: Excuse me, before you start, do
22 you have demonstratives for the court reporter?

1 MR. ABRAHAMSEN: I do. In fact, I have extra
2 copies, if you would like paper copies as well.

3 JUDGE CHANG: I want a hard copy. Judge Bisk?

4 JUDGE BISK: No, thanks.

5 MR. ABRAHAMSEN: May I approach?

6 JUDGE CHANG: I just need one.

7 MR. ABRAHAMSEN: Starting with slide 2 of the
8 demonstratives, this IPR concerns the '822 patent, which is
9 directed to devices for getting data on to and off of a
10 broadband radio frequency communication system.

11 The patent has 31 claims, two of which are
12 independent, claims 1 and 19. And the broadest claims, claim
13 1, is reproduced here, can be read on any of four different
14 embodiments described in connection with figures 2, 5, 6 and 7
15 of the patent.

16 Figure 2 is shown here, which I think is the
17 simplest embodiment. Now, this distribution on the right
18 where it says the incoming RF signal is coming in. There is
19 actually data coming from a large number of these so-called
20 addressable devices that is included in this incoming RF
21 signal. And in the example of the patent, there can be as many
22 as 29 different channels, each channel, six megahertz wide,

1 that is coming into this system.

2 ChanBond's expert referred to this incoming RF
3 signal as an RF soup of information. Now, what happens is
4 this incoming RF signal comes in, the channels that are active
5 of those 29 available channels are identified, and the channels
6 that are in use, each of those channels is demodulated by a
7 separate demodulator in this demodulator bank 220, the green
8 element there. So you can have as many as 29 demodulators in
9 this bank, in parallel, demodulating 29 different channels.

10 Each of those demodulators outputs a stream of
11 data, which is fed to the combiner. And then the combiner
12 combines those streams of data into a single very high-speed
13 serial stream that the patent says can be on the order of
14 multiple gigahertz of data coming out of there.

15 So that's the basic way that the claim can be read
16 on one of the embodiments. Any questions before I move on?

17 JUDGE HARLOW: Not so far.

18 MR. ABRAHAMSEN: Okay. We proposed four
19 grounds of unpatentability. They are listed here. I won't go
20 through them. But this shows the grounds and the various
21 claims that are challenged.

22 And of those grounds, there really are two core

1 theories that we have raised, both are obviousness theories.
2 One of those is the Rakib reference in view of a DOCSIS
3 specification, and the second is an obviousness theory in view
4 of Haugli, in view of the Grindahl reference is a secondary
5 reference.

6 All claims were challenged under the first theory.
7 We did not challenge claims 15 and 30 under the second.

8 Now, starting with the first core theory, the Rakib
9 DOCSIS combination, there are really three disputes the
10 parties had with respect to this combination. The second, it
11 seems like ChanBond is really not disputing, so I am not going
12 to talk about that today. I will rest on the papers on that one.

13 JUDGE HARLOW: I'm sorry, counsel. Are you
14 saying that ChanBond doesn't seem today to be discussing the
15 rationale to combine aspect?

16 MR. ABRAHAMSEN: No, I'm sorry, the second
17 one, yes, the rationale to combine for this particular reference.
18 If you would like me to go into that, I will.

19 JUDGE HARLOW: We - I actually would like to
20 discuss the rationale to combine for both combinations, but in
21 particular for the Rakib and DOCSIS combination, if we can do
22 that.

1 MR. ABRAHAMSEN: Oh, sure, sure. I am happy
2 to do that.

3 So the first dispute is whether the DOCSIS
4 specification qualifies as prior art to the '822 patent. The
5 second is the motivation to combine. And the third is really a
6 claim construction issue, the patent meaning of the term
7 "stream" that occurs in several other claims in the patent.

8 So starting with the first one, whether the
9 specification qualifies as prior art, this is from our expert's
10 declaration setting forth his personal knowledge of the public
11 accessibility of this document and outlining the basis of that.

12 He was not challenged on cross-examination on that
13 knowledge. And Mr. or Dr. Nettles, their expert, did not rebut
14 this testimony.

15 This very same specification was incorporated by
16 reference into at least two prior-filed patents we found. I am
17 on slide 7 now. One of the patents was filed November '98.
18 The other July '99. The '822 patent was not filed until
19 December of 2000.

20 So this is contemporaneous evidence showing
21 public accessibility of this -- of this specification. We also
22 identified two RFC publications from August of 1999, each of

1 which in their end notes identify this exact specification and
2 also identify the URL at which someone could download the
3 specification for use.

4 And we also have testimony from a Cable Labs'
5 employee, who is the entity that puts out this specification
6 testifying about the significance of this URL and, particularly,
7 the prefix that ends in public, testifying that that --

8 JUDGE HARLOW: And, counsel, what personal
9 knowledge did the Cable Labs' declarant and deponent have
10 concerning the viability of that URL and whether it was, in
11 fact, publicly accessible?

12 MR. ABRAHAMSEN: That specific URL, I don't
13 know that she had personal knowledge of that. She was aware
14 of the prefix and what that would have signified as far as the
15 public accessibility.

16 JUDGE HARLOW: And by prefix, you are
17 referring to part that comes after "cablemodem.com" where it
18 says public?

19 MR. ABRAHAMSEN: Public and PublicTechSpec,
20 yeah. So that was her testimony is that when she saw that, she
21 knew for sure that as of this date, this document was publicly
22 accessible on their web site.

1 JUDGE HARLOW: And it is your position that
2 even if we were to disregard her testimony, you would
3 nevertheless have established more than sufficient evidence of
4 public accessibility based on your expert's declaration, as well
5 as the references you have identified?

6 MR. ABRAHAMSEN: That's correct. Finally, I
7 don't think we need this, but those prior-filed patents are
8 themselves 102(e) prior art to the '822 patent.

9 JUDGE HARLOW: Right.

10 MR. ABRAHAMSEN: And because this was
11 incorporated by reference into those prior-filed patents, it also
12 was available under 102(e).

13 JUDGE HARLOW: I am not sure it is worth using
14 your time to dive in this because, as you said, I am not sure
15 you need it, but perhaps you could briefly elaborate on the
16 second half of your sentence.

17 So I understand why those prior art patents would
18 be considered 102(e) art and why those patents, had they been
19 cited in your combinations, would have been determined to
20 have incorporated by reference DOCSIS, but I am not sure how
21 that 102(e) rationale can then be imputed to the DOCSIS
22 specification itself.

1 Could you elaborate on that, please?

2 MR. ABRAHAMSEN: You are right. The
3 combination would have to be of the prior-filed patents in view
4 of Rakib or Rakib in view of the prior-filed patents, but my
5 point was because this was incorporated by reference in the
6 prior art filed patents, we get to the same place, that it is
7 available.

8 JUDGE HARLOW: Right. One could imagine that
9 the prior-filed patents would help substantiate your claim that
10 DOCSIS was, in fact, publicly available, but may not
11 necessarily bring DOCSIS itself into the realm of 102(e) art
12 based on its incorporation by reference; is that fair?

13 MR. ABRAHAMSEN: Well, I think it is 102(e) art.
14 The patent is 102(e) art. And because the patent includes the
15 DOCSIS specification as part of it -- its entirety --

16 JUDGE HARLOW: But you didn't cite the patents
17 against the challenged claims?

18 MR. ABRAHAMSEN: It was not specifically
19 outlined in our core theories, but we did raise this as a ground.

20 JUDGE HARLOW: But you are not taking the
21 position that DOCSIS itself is 102(e) art; is that correct?

22 MR. ABRAHAMSEN: That's correct. We're just

1 saying it is available under 102(e) with these patents as the
2 vehicle to making them available.

3 JUDGE HARLOW: Understood.

4 MR. ABRAHAMSEN: Okay. And on the
5 combinability point, DOCSIS or ChanBond's complaint was
6 that a new release had come out at the time the '822 patent was
7 filed.

8 And release 5 purportedly replaced release 4, which
9 we cited, but our point is that doesn't impact the technical
10 compatibility of Rakib with a DOCSIS specification. It is
11 obvious over both versions.

12 The fact that a new version came out doesn't make
13 it not obvious over the old version is the only point we're
14 making.

15 JUDGE HARLOW: But don't we need a bit more
16 than just the possibility of technical combinability for the
17 reason to combine, especially in view of more recent Federal
18 Circuit precedent further clarifying the -- our reviewing
19 Court's stance on what is required for a reason to combine?

20 MR. ABRAHAMSEN: I see. This is the only
21 argument they raised against this. We do have evidence,
22 though.

1 Rakib itself -- I am on slide 11 now -- Rakib says
2 that the cable modem that is used in Rakib can be a cable
3 modem that conforms to the DOCSIS standard, any new or
4 existing DOCSIS standard. Rakib itself suggests --

5 JUDGE HARLOW: Sure. I understand that it
6 suggests that one could potentially use different versions of
7 DOCSIS with Rakib. What I am trying to get at as Petitioner is
8 you bear a burden to show that an ordinarily skilled artisan
9 would have had a reason to make the proposed combination,
10 and I would like you to flesh that out a little bit, what your
11 reason for putting them together.

12 I understand that it is technically possible to put
13 the two things together.

14 MR. ABRAHAMSEN: Yes.

15 JUDGE HARLOW: But I think we need a bit more
16 discussion of the reason why someone would choose to do that.

17 MR. ABRAHAMSEN: I think that is Rakib's
18 express teaching, that the cable modems that are used with
19 Rakib, should conform to the DOCSIS specifications. That's
20 an express teaching that with Rakib, you use one of these
21 specifications. And this is one of the ones Rakib refers to.

22 JUDGE HARLOW: This particular specification, is

1 it explicitly referred to in Rakib? We're talking about
2 specification 1.4; is that correct?

3 MR. ABRAHAMSEN: Rakib mentions 1.2, which
4 didn't even exist. It never came out. But Rakib does say that
5 instead of that, you could use any existing or later-developed
6 DOCSIS specification. So there is an express teaching saying,
7 hey, go find a DOCSIS specification and follow that, and it
8 will work with this invention.

9 JUDGE BISK: I have a question, though. But
10 wouldn't an ordinary skilled artisan use the most recent one?
11 And so if release 5 actually was out at the time of the
12 invention, wouldn't -- why would they use an older version
13 one? If they are the same, how do we know that, release 4 and
14 release 5 are so similar that it doesn't matter?

15 MR. ABRAHAMSEN: The issue is technical
16 compatibility. It is not whether they would have chosen that
17 specific one. It is whether it would have been obvious to use
18 either one.

19 And, yes, a person of skill in the art looking at a
20 specification would realize whether or not a new version has
21 come out, that it would have been obvious to use an older
22 version. It is -- the fact that a new one comes out doesn't make

1 the older version non-obvious. It is technical compatibility,
2 not commercial viability or desirability or that sort of thing.

3 JUDGE BISK: Where are you getting this technical
4 compatibility term? Is that in any Federal Circuit cases?

5 MR. ABRAHAMSEN: We actually cited it in our
6 reply.

7 JUDGE HARLOW: I think, counsel, you are
8 looking for In re Fahrenkopf case from 1983?

9 MR. ABRAHAMSEN: That's correct. And in that
10 case, an argument was made that the commercial reasons would
11 have led a person not to make a combination. And the Court
12 said no, we don't look at the commercial reasons. We look at
13 whether it would have been obvious technically to put them
14 together.

15 JUDGE HARLOW: But, of course, we do have
16 more recent precedent where, in fact, the Federal Circuit and
17 the Supreme Court have at least instructed that it is possible
18 and relevant to think about commercial applications?

19 MR. ABRAHAMSEN: I am not familiar with those
20 specific cases. I don't know how to respond.

21 JUDGE HARLOW: For an example, so in a slightly
22 different context, but, for example, in KSR, the discussion of a

1 desire in the market to do something could supply a motivation
2 to combine. It is a bit different than what we're talking about
3 here in the sense that you aren't affirmatively attempting to
4 rely on marketplace considerations to drive it but, rather,
5 Patent Owner is saying the complete absence of any evidence
6 that someone would want to do this is a reason to find the
7 claims not unpatentable.

8 So your -- I'm sorry, go ahead.

9 MR. ABRAHAMSEN: I was just going to say,
10 Rakib itself can be any known or future developed cable
11 modem. That is saying that any known modem would have any
12 existing prior standard in it. And the future developed are
13 versions that come out later.

14 So I think Rakib addresses this.

15 JUDGE HARLOW: Is there evidence in the record
16 that DOCSIS 1.1.5 and 1.1.4 have the same disclosure as the
17 portions of 1.1.4 that you are relying on in your petition?

18 MR. ABRAHAMSEN: This following excerpt from
19 our expert here, paragraph 52, does say that a discussion he
20 provides about DOCSIS applies to all versions of DOCSIS 1.1,
21 which would include version 4 and version 5. So in all
22 relevant respects, there would not be a difference here. I think

1 this evidence supports that.

2 JUDGE HARLOW: And is that the extent of the
3 evidence supporting the commonality between the two DOCSIS
4 disclosures?

5 MR. ABRAHAMSEN: In the record, yes, that's
6 correct.

7 JUDGE HARLOW: Okay.

8 MR. ABRAHAMSEN: Moving on to the claim
9 construction issue, the meaning of the term "stream," first of
10 all, the reason why this is significant, this is figure 4A from
11 Rakib and figure 3 from Rakib. And figure 4A is really a
12 detailed version of the gateway, which is element 14 in figure
13 3, just to provide context.

14 But we have asserted that this routing circuit,
15 element 86 that is highlighted in the middle, can correspond to
16 the combiner that's recited in the claims of the patent. And to
17 do that, we need to call the output of this combiner a stream.
18 And the dispute is whether that can be called a stream or not.

19 And there are actually two streams here, because
20 some of them, the independent claims rely on the stream going
21 down, the dependent claims rely on the stream going to the
22 left. But in either case, we believe that can correctly be called

1 a stream.

2 In its expert declaration, Dr. Nettles, ChanBond's
3 expert, purported to provide a definition of a stream. And RPX
4 actually agrees with the first part, that a stream is a sequence
5 of packets or similar data structures used to transmit
6 information. But Dr. Nettles went on to say that these streams
7 or these packets must somehow be tied or linked together in
8 terms of their content. So they would be recognized as being
9 the part of the same overall communication.

10 And he is essentially referring to, I think, a
11 Netflix-type stream where we have a streaming sequence of
12 packets, you have a stream in that context, so that's the dispute
13 is there would have to be a Netflix-type stream or could it be
14 any sequence of packets to qualify as a stream? I think that's
15 where the parties differ.

16 We do agree that in some contexts, a stream can be
17 used to refer to a Netflix-type of a stream, but that's not how
18 the '822 patent uses the term. Our expert didn't offer an
19 opinion on the meaning of stream because we thought the
20 intrinsic evidence was so clear.

21 JUDGE HARLOW: Well, he certainly did testify as
22 to the meaning of stream in the context of claim 1, though, in

1 his deposition; isn't that correct?

2 MR. ABRAHAMSEN: When I read that deposition
3 testimony, I find it very confusing, and I actually think it
4 means that he is saying that it depends on the context, really. I
5 didn't see a clear definition.

6 JUDGE HARLOW: He was being clearly asked in
7 the context of claim 1 in the portions of the deposition
8 transcript on which Patent Owner relies, and he tends to testify
9 at least in that first section of testimony, let's call it, that the
10 Patent Owner is most reliant upon, that in the context of claim
11 1, a stream would be the same communication.

12 I understand that it is Petitioner's position that he
13 subsequently says something a little bit different, but is it not
14 the case that he answers questions with regard to claim 1 in a
15 way that suggests the stream should, in fact, be a single
16 communication?

17 MR. ABRAHAMSEN: Again, he was asked that
18 question. I found his response very confusing. I didn't think it
19 was a clear definition in his testimony.

20 I think he was trying to be a teacher and explain
21 what a stream could be and didn't really take into consideration
22 the full content of the question. I don't think he intended to

1 say that stream has to be this. I think he was kind of just being
2 a teacher about what a stream could be.

3 JUDGE HARLOW: So there seems to be a bit of a
4 tension with regard to stream because I understand the portions
5 of the specification that Petitioner relies on as suggesting that
6 in the context of the patent, a stream is a loosely-used term. It
7 simply -- one could interpret the sections of the specification
8 that Petitioner points to as referring to simply a sequence of
9 bits, basically, or the definition that you place here.

10 But then we have both experts when they talk about
11 stream, they seem to think of stream as being a little bit more
12 narrow and both experts in their "teaching role" talking about
13 how a person of ordinary skill in the art would understand a
14 stream seem to think that it pertains to a single communication
15 as opposed to just bits being transferred.

16 And so the question I have for you is how do we
17 reconcile the rather minimalist discussion in the specification
18 and what seems to be an agreement between the two experts as
19 to how a person of ordinary skill would understand the term
20 "stream"?

21 MR. ABRAHAMSEN: First of all I would disagree
22 that the specification is minimalist. I think it is very explicit

1 about what they mean by stream in the specification and we
2 will go through that. But I think this last point on this slide,
3 this is slide 14, is actually really important.

4 Because the intrinsic evidence in our view is so
5 clear on the meaning of this term, then we think it would be
6 legal error to consider any extrinsic evidence, expert testimony
7 or otherwise, to alter that clear meaning from the intrinsic
8 evidence.

9 JUDGE HARLOW: It is not your position that the
10 specification applies to stream, is it?

11 MR. ABRAHAMSEN: I think the specification is
12 very clear that a stream can be just a sequence of packets.

13 JUDGE HARLOW: Well, the specification talks
14 about a stream, I believe it uses the term stream approximately
15 once. And it talks about it in the context of, I guess, we're
16 going from multiple addressable devices through the combiner
17 and then back out, where we would have presumably
18 everything from all those different devices in a "stream,"
19 which would obviously encompass more than one
20 communication, but the specification only discusses that in one
21 place and it doesn't otherwise set forth any definition, does it?

22 MR. ABRAHAMSEN: Express definition, no, but

1 that is the one example the specification provides. And that
2 example is actually claimed, that stream is actually in some of
3 the dependent claims.

4 And the fact that there are multiple devices going
5 to multiple destinations with entirely unrelated content and the
6 specification calls it a stream in that one circumstance and
7 claims stream to cover that one circumstance, I think, is very
8 clear that the claim is broad enough to cover just a sequence of
9 packets. I see no other way that could be interpreted.

10 May I move on?

11 JUDGE HARLOW: Yes, please.

12 MR. ABRAHAMSEN: So we covered this already
13 in that dialogue. And I am scrolling through the slides here.

14 JUDGE BISK: I'm sorry. I have one more question
15 because looking at your slide that says that the expert's
16 cross-examination is confusing and essentially shows that the
17 meaning of stream is context-dependent, but then Judge Harlow
18 was asking you in the specification that uses the word stream
19 only in one of the one contexts, so I am a little confused at
20 how the specification can be clear on what stream means?

21 MR. ABRAHAMSEN: It is because that one usage
22 is describing output of that blue element there. I am on slide

1 27. That one output of 410, and there is no way that one
2 output can be considered a Netflix-type of stream where the
3 content is tied together. It is coming from different
4 addressable devices on the left, going to different destinations,
5 and the witness agreed that it is unrelated in content, or their
6 expert did.

7 All right. The fact that stream is used that way and
8 can cover that means it has to be broad enough to be any
9 sequence of packets. It can't be limited to a Netflix-type
10 stream. Let's see. Let's move on to the next combination, if
11 that's okay.

12 Haugli and Grindahl, let's see, so I won't dwell on
13 this, but in the Institution decision, you agreed that Mr.
14 Koperda's testimony supporting the combinability of this
15 reference was adequate. And I think that the
16 cross-examination testimony of Dr. Nettles actually pretty
17 strongly supports that same rationale, which we will discuss in
18 a minute.

19 This is the Haugli patent, which is our primary
20 reference -- I'm sorry, this is the Grindahl patent, the
21 secondary reference. And at his deposition, I cross-examined
22 Dr. Nettles on this. And I asked him, you know, in this device,

1 these yellow boxes -- I am at slide 34, I'm sorry -- these yellow
2 boxes, Number 14, those are separate from the computers that
3 they are servicing, and he said yeah. And I asked him what the
4 benefits of having those boxes separate from the computers
5 would be? And each of them has an antenna, a transceiver, and
6 a modem. In his first point in response was that one benefit is
7 it enables the configuration in the bottom, which is you have
8 multiple computers sharing the same piece of communication
9 hardware. You don't have to have a separate piece of
10 communication hardware for every computer. So that was one
11 benefit.

12 And another advantage he mentioned was that in a
13 single user environment above, you don't have to have a
14 special purpose computer to be able to talk to this network.
15 Instead, you could have this middle box, Number 14 he called
16 it, which sits between your personal computer and the network.
17 And then you just plug your computer into the Ethernet port
18 and be able to access the network. You don't have to have all
19 that special purpose device inside of your PC. Those are two
20 benefits that he identified to our secondary reference.

21 JUDGE HARLOW: And can you point us to where
22 in the petition, the middle box theory as well as the multiple

1 end user theory are set forth? Because I understand what
2 Patent Owner's expert said during cross-examination, but it is
3 obviously the Petitioner's burden here.

4 MR. ABRAHAMSEN: Well, I think it is in -- you
5 quoted Mr. Koperda's testimony here. And he said it is the
6 reason of allowing Haugli's terminal to transfer data to one or
7 more host computers.

8 So you have the terminal, you have host computers
9 that you want to use on the network, and applying this
10 combination allows you to transfer data from the computers to
11 the network and not just from the terminal --

12 JUDGE HARLOW: But isn't that a slightly
13 different combination than the one you are talking about with
14 regard to Dr. Nettles' testimony? Because my understanding of
15 Mr. Koperda's testimony is that you would have the terminal
16 11, the end user terminal 11 from Haugli, and that that
17 terminal, which is a complete device, including all the
18 communications equipment as well as end user equipment
19 would then be able to subsequently transmit information to
20 other devices or is your combination something different and
21 can you show us where that combination is clearly set forth in
22 the petition?

1 MR. ABRAHAMSEN: Well, let me find a slide
2 where -- that first shows Haugli. Haugli -- I am on slide 36 --
3 Haugli is on the bottom. I believe what Mr. Koperda was
4 saying that if you have your fixed terminal 11 on the bottom --
5 let me find it highlighted. Here is slide 37.

6 That applying and teaching Grindahl to Haugli
7 would allow you to basically plug your computer into that
8 fixed terminal 11 there (indicating). And, in essence, it allows
9 that fixed terminal to act as a middle box. Now, he didn't use
10 the term middle box, but that's what he was describing is that
11 you would have an output of that fixed terminal 11, the
12 Ethernet output, that could talk to computers and then those
13 computers could, in turn, talk to the system.

14 JUDGE HARLOW: Counsel, by way of heads up,
15 you have three minutes remaining before you are into your
16 rebuttal time.

17 MR. ABRAHAMSEN: Okay. Let's see. In terms
18 of the ability, the combinability of these two references,
19 Haugli and Grindahl -- I am on slide 40 -- Dr. Nettles did agree
20 that they could be combined and that you would achieve the
21 advantages. His only complaint was he said there was no
22 motivation to do that in Haugli. There is no motivation to do

1 that in our primary reference, was his response.

2 But he did agree that it could be done and it would
3 provide benefits.

4 The problem with that argument is that we didn't
5 argue the motivation came from the primary reference, Haugli.
6 We argued the motivation came from the secondary reference,
7 Grindahl, which taught this Ethernet connection middle box
8 approach.

9 So we think that the focus only on Haugli is wrong.
10 And as I discussed a minute ago, I think applying Grindahl's
11 middle box approach to Haugli's terminals makes a whole lot
12 of sense. You already have your terminals. And you want to
13 be able to use the same general purpose computers with them?
14 You add an Ethernet port and you allow the terminal 11 to act
15 as a middle box, rather than the end of the road for the data.

16 JUDGE HARLOW: But why would you take a
17 complete terminal and then attach an Ethernet cable to it to
18 allow it to access a general purpose computer if you already
19 have a fully functional end unit from Haugli, the terminal 11?

20 MR. ABRAHAMSEN: Well, the idea is you would
21 take Haugli and instead of being an end terminal, it would be a
22 middle box. It would be a way of getting data to the end.

1 JUDGE HARLOW: And can you show me where in
2 the petition it says to do that? Because my understanding of
3 what you set forth in the petition is that you take the end
4 terminal of Haugli, you add an Ethernet port to it based on the
5 fact that there is an IO serial port existing and all of a sudden
6 you can connect it to something else.

7 Where do you propose using it as a middle box?

8 MR. ABRAHAMSEN: Well, the IO serial port is
9 an existing IO port. We're not relying on that.

10 JUDGE HARLOW: Right. I know. You are
11 relying on it as your motivation to add an Ethernet port.

12 MR. ABRAHAMSEN: As part of the motivation.

13 JUDGE HARLOW: I am not concerned about the
14 IO port. What I want to know is what is your proposed
15 combination? Because my understanding of the petition is that
16 you have got an end terminal from Haugli and then you have
17 added an Ethernet port to it. And so now you can connect
18 some other device to it. But what you are suggesting is
19 instead, seems to be seizing on Dr. Nettles' idea of separating
20 the end terminal of Haugli, so that you have all this
21 communications equipment and then you can use that to
22 communicate to multiple general purpose computers and do

1 other things. And I just want to know where in the petition
2 this middle box theory is set forth?

3 MR. ABRAHAMSEN: I think it is in the idea -- it
4 is all in Koperda's declaration which we looked at a second
5 ago.

6 JUDGE HARLOW: Can you point me to the
7 specific portions of Mr. Koperda's declaration?

8 MR. ABRAHAMSEN: That was in that section I
9 quoted before -- sorry, I have to scroll back to this -- that the
10 reason for the reason you make this -- you add hardware
11 necessary to implement Ethernet communications, for the
12 reason allowing the terminal to transfer data from the ground
13 station, which is the other side of the network, to the host
14 computers. And it would have to do that treating that terminal
15 11 as a middle box because it is going from the ground station
16 to the terminal to the host computers, it is acting as a middle
17 box.

18 I think, again, he didn't use the word "middle box,"
19 but that's what he was explaining is you add the Ethernet port
20 to allow the PCs to talk to the network.

21 JUDGE HARLOW: Okay. Thank you.

22 MR. ABRAHAMSEN: May I ask how much time I

1 have remaining?

2 JUDGE CHANG: You are in your rebuttal time.

3 MR. ABRAHAMSEN: I will just make one point
4 about this, that they say the claim can't be read on the
5 demodulation step, that this is in claim 1 here. I am on slide
6 45.

7 ChanBond argues that that can't read on this system
8 because they say that this QDEMOD block 31 always
9 modulates a signal and doesn't do it only when a control
10 channel used information says it should. Our point there is
11 that DSP 35 does perform demodulation.

12 And I think this is actually addressed very clearly
13 in the briefs, so I don't want that I need to spend a lot of time
14 on that.

15 But I did cross-examine Dr. Nettles on this. Before
16 I move on, slide 46 cites Koperda's testimony describing the
17 multiple demodulation stages, including the final one by the
18 DSP.

19 And during cross-examination I had to chase
20 Dr. Nettles around the tree a few times but he did agree that
21 that final stage potentially could be called demodulation. It is
22 not uncommon usage, he said, to call it demodulation. You

1 know, similar testimony, wouldn't be surprised if someone
2 called it demodulation, et cetera.

3 And he said, in general, if he came up and asked
4 me a random is this part of my modem doing demodulation? I
5 think a person of ordinary skill in the art would say yeah, was
6 his response. And that's on slide 50.

7 I think I will rest on the papers for the final
8 grounds and save the remainder of my time for rebuttal.

9 JUDGE HARLOW: Thank you, Mr. Abrahamsen.

10 MR. ABRAHAMSEN: Unless you have further
11 questions.

12 JUDGE HARLOW: None from me.

13 MR. ABRAHAMSEN: Okay, thank you.

14 JUDGE CHANG: Thank you. Mr. Fahmi?

15 MR. FAHMI: Thank you, Your Honors. I do have
16 copies of the demonstratives, if Your Honors would like one.

17 JUDGE CHANG: A copy for me. Thank you.

18 MR. FAHMI: May it please the Board, Your
19 Honors, the Board should find in favor of the Patent Owner on
20 all of the issues that have been instituted for trial. As you
21 heard from my colleague, RPX presents two basic challenges to
22 the claims that are under review; one that relies on the

1 teachings of Rakib and the DOCSIS 1.1 specification and the
2 other that relies on the teachings of Haugli and Grindahl.

3 Now, with respect to that first combination,
4 Rakib/DOCSIS combination, neither reference nor their
5 combination teaches or suggests the combiner limitation of the
6 claims. And RPX's own analysis as set forth in the Koperda
7 declaration shows that at most what you are dealing with is
8 information from a DOCSIS data channel and information from
9 a video-on-demand channel both being output by a routing
10 circuit, that is 86 in figure 4A, one to the -- to a computer that
11 is attached to a local area network.

12 And this is Mr. Koperda's declaration, paragraph
13 58, but Mr. Koperda also says in deposition that simply
14 because packets may be destined for the same address on a
15 LAN doesn't mean that they are part of and, importantly, a
16 person of ordinary skill in the art would not consider them to
17 be the same stream. This is Mr. Koperda's deposition, our
18 Exhibit 2005, starting on page 17 crossing over on to page 18.

19 JUDGE BISK: Can you address your colleague's
20 argument that the specification only discusses stream in one
21 place, it is very clear, and, therefore, we should not look to
22 extrinsic evidence?

1 MR. FAHMI: Well, let's look at that one place,
2 Your Honor. And I agree, the term "stream" is only used once
3 in the specification. It is in column 10. And it appears in a
4 passage that begins at about line 10 and carries over on to line
5 14. Let me read it for you. "However, the channel width can,
6 for example, be increased from 6 megahertz per channel to 12
7 megahertz per channel in order to accommodate, for example,
8 the 80 megabit per second digital stream, if adjacent channel
9 space is available or unused."

10 So what is that talking about? That's talking about
11 what today we would call channel bonding. The use of more
12 than one channel to accommodate a data stream that cannot be
13 accommodated on a single channel, the channel bandwidth is
14 simply inadequate to accommodate the stream.

15 And so you modulate the stream over two or more
16 adjacent channels, in this case, so that the band -- the available
17 bandwidth is provided. That is how stream is characterized in
18 the patent. It is a common communication that has a
19 bandwidth that can't be accommodated on a single channel, and
20 so more than one channel is needed.

21 And I would submit that that interpretation of
22 "stream" is exactly what Mr. Koperda had in mind during our

1 discussion in his deposition, and that's exactly why he said that
2 simply because packets are destined to the same address on a
3 network, doesn't mean they are part of the same stream.

4 And nor does --

5 JUDGE HARLOW: I'm sorry, please finish your
6 thought. I will hold my question.

7 MR. FAHMI: Well, I was about to remark that
8 there is nothing in the Rakib/DOCSIS combination that would
9 suggest we are ever dealing with a situation such as that I have
10 just outlined where information from two different channels
11 are being combined into a single common stream.

12 JUDGE HARLOW: So looking at figure 5 of the
13 challenged patent, and combiner 410 in that figure, my
14 understanding was that during his deposition Dr. Nettles
15 testified that the output of digital combiner 410 was a stream
16 in the context of the specification of the challenged patent.

17 It is also my understanding that he acknowledged
18 that that output would, in fact, encompass communications that
19 are not the same communication but, rather, could come from
20 either different sources or have different content. Is that a
21 correct understanding of his testimony?

22 MR. FAHMI: I certainly agree with the first part,

1 Your Honor. I think in the second part he was speaking more
2 hypothetically and not suggesting that that is the only
3 embodiment disclosed in the specification, because the passage
4 I just read from the specification clearly contemplates a single
5 80 megabit per second digital stream as its output and inputs
6 coming from different 6 megabit per second channels or,
7 excuse me, 8 megahertz channels.

8 JUDGE HARLOW: So if I understand the section
9 of the specification you are discussing, wouldn't that be
10 consistent with the embodiment that we were just looking at,
11 that you would have communications coming in on different
12 channels and then it is combined into a single stream, but that
13 stream would nevertheless be capable of including content that
14 is from different sources or that is not a single communication?

15 MR. FAHMI: Well, it certainly could be different
16 sources, but I don't see anything in the patent that says they
17 are different communications. The mere fact that they are
18 from different sources does not suggest that they are, in fact,
19 different communications.

20 JUDGE BISK: You lost me. Can you explain that?
21 How does the same communication come from multiple
22 sources?

1 MR. FAHMI: Well, it could be load balanced
2 across different servers, Your Honor, and different servers
3 could be used to provide different parts of the same
4 communication.

5 JUDGE HARLOW: But based on the specification
6 we just don't know, right? There is nothing in the
7 specification to suggest either way that it is, in fact, the single
8 example you just gave?

9 MR. FAHMI: I can't think of where it would be in
10 the specification off the top of my head, Your Honor, except to
11 say that in the transmit example that is shown in figure 4, it is
12 contemplating embodiments where you have this source --
13 excuse me, the 80 megabit per second stream made up of the
14 different channels. I think that's the only -- the only reference
15 in the specification.

16 JUDGE HARLOW: And you don't disagree that
17 Dr. Nettles in discussing this embodiment testified that the
18 stream that is being output by item 410 in figure 5 could, in
19 fact, include multiple communications?

20 MR. FAHMI: No, I don't disagree that he said that.

21 JUDGE HARLOW: Okay. There seems to be
22 agreement between the experts that it would be common to use

1 the term "stream" to refer to a single communication, but also
2 that the term "stream" can be used in different ways and in
3 some instances might be used with less precision.

4 And based on the testimony of both experts and the
5 statements in the specification, as well as the depiction in the
6 figures, it would seem to be the case that the challenged patent
7 is, in fact, using "stream" in a more general sense to refer to
8 packets that are being output across a network.

9 MR. FAHMI: No, I disagree with that conclusion,
10 Your Honor. The patent is clearly using the term "stream" in
11 order to speak to a situation where you are dealing with a
12 single communication. And the single communication is --
13 requires the use of more than a single channel because the
14 bandwidth of a single channel is --

15 JUDGE HARLOW: How do we know that the
16 discussion of figure 5 and the discussion in columns 9 and 10,
17 in particular, is referring to a single communication?

18 MR. FAHMI: Well, I think it is evidence from the
19 text and also the overall teaching in the specification. The
20 overall teaching is one where information is being combined
21 from different channels, intended for a single addressable
22 device, and on the receive side, the multiple channels are

1 demodulated and then fashioned into or reconstituted into the
2 original stream.

3 JUDGE HARLOW: Where -- where in the
4 specification does it discuss single communications? That's
5 the part that seems to be missing. The specification doesn't
6 seem to concern itself with anything other than the addressable
7 device to which packets will be delivered. It doesn't seem to
8 discuss how different packets in different communications are
9 to be combined together or sort of or sent. It seems to simply
10 be focusing on packets being addressed to a device and
11 ultimately being delivered to that device. Where do we get
12 single communication from the specification?

13 MR. FAHMI: I think one has to read the channel
14 and use information that is described as providing that
15 teaching, Your Honor. So the reason the channel and use
16 information is provided is to know whether the communication
17 is intended for the addressable device.

18 And so the DSP --

19 JUDGE HARLOW: Can you point me to where the
20 specification is discussing the channel and use information and
21 how it is used?

22 MR. FAHMI: Well, for example, in column 11,

1 beginning at line 20, it is discussing the demodulation and then
2 the combination. And prior to that, we're told that the
3 demodulation occurs based upon the channel and use
4 information.

5 For example --

6 JUDGE HARLOW: Where are we looking?

7 MR. FAHMI: For example, at the bottom of
8 column 10, band pass filters, this is beginning at line 65, the
9 band pass filters may be electronically controlled by the digital
10 single processor 420, and then into column 11, that would be
11 based on the channel and use information, of course. And then
12 into column 20 in the passage I mentioned, beginning at line
13 20.

14 There is further discussion -- let me find it for you
15 -- in column 9, beginning at line 14. The DSP preferably
16 controls RF channel detection in the at least one demodulator
17 220. So that control of the demodulator is based on the
18 channel use information as recited in the claim.

19 JUDGE HARLOW: But we don't have any
20 indication that channel and use information is providing
21 information regarding which packets are part of the single
22 communication, do we?

1 MR. FAHMI: It is specified in the sense that the
2 channel and use information provides information about which
3 addressable device the information is intended for.

4 JUDGE HARLOW: Right. But my understanding
5 is it is Patent Owner's position that despite the language of the
6 claims and the exclusive focus on addressable devices in the
7 specification, there is an additional requirement for a digital
8 stream and that's that information has to all be part of the same
9 communication. It is not enough that it goes to the same
10 addressable device.

11 And I am looking for some support for the position
12 that there is more than just addressing to a particular
13 addressable device required, that there is also some
14 information about the particular communication and that says
15 that only a single communication can be part of a digital
16 stream.

17 MR. FAHMI: Yeah, I think the only passages that
18 support that, Your Honor, are the ones that I have mentioned.
19 Additionally, maybe column 10, lines 10 through 14. This was
20 the discussion about increasing channel bandwidth to
21 accommodate the single stream.

22 And then it really is the testimony of both

1 Dr. Nettles and Mr. Koperda insofar as they agree that when a
2 person of ordinary skill in the art reads this, they would
3 understand that the claim is talking about a single stream,
4 single communication. This is Dr. Nettles, paragraph 55 of his
5 declaration. Mr. Koperda in his deposition, that is
6 Exhibit 2005, page 16, line 24, through page 17, line 5.

7 So it really is the expert analysis of what is
8 described in the specification.

9 JUDGE HARLOW: Is it Patent Owner's position
10 that the term "stream" as recited in the various challenged
11 claims should be interpreted the same way across those claims
12 regardless of whether they are discussing upstream or
13 downstream-type embodiments, so embodiments such as that
14 where we have information from multiple addressable devices
15 coming into combiner 410 and then vice versa, information that
16 is coming into a combiner like combiner 212 and being output
17 to separate addressable devices? Should stream be interpreted
18 both ways or the same way in both contexts?

19 MR. FAHMI: I think that would be correct, Your
20 Honor, yes. There doesn't seem to be an indication that the
21 patentee used it in different ways in different places.

22 JUDGE HARLOW: So then we get back to the

1 discussion in Dr. Nettles' testimony about how the output of
2 digital combiner 410 would be a stream under the patent, but
3 that may, in fact, include content that is from different
4 communications?

5 MR. FAHMI: Well, I think different sources. I
6 don't think different communications.

7 JUDGE HARLOW: Okay. Can you explain, again,
8 just one last time briefly, I know we have gone through this
9 once, how it is that content from different sources can all be
10 part of the same communication?

11 MR. FAHMI: Well, content can be split across
12 different sources, Your Honor. Different servers, for example,
13 can provide different portions of a stream. That would be
14 something on the transmit side.

15 And I think in Dr. Nettles' testimony, there was --
16 and this may have been during deposition, I don't have an exact
17 cite -- there was an indication that streams are identified
18 according to some unique identifier. You could think of it as a
19 stream ID. And so there is nothing that would preclude
20 sources from transmitting what should be considered the same
21 stream, as long as their agreement -- there is agreement upon
22 the stream IDs that are going to be used.

1 JUDGE HARLOW: Okay. Can we zoom in briefly
2 then on Dr. Nettles' testimony? I am looking in particular at
3 page 79, line 16 through 19, the question: But the question
4 was the data in that 80 megabit stream, 80 megabit per second
5 stream is not at all related to the same content?

6 "Answer: No, it is not."

7 How do we reconcile that testimony with the
8 hypothetical embodiment you are describing to us where
9 information from the same communication is being bounced
10 across multiple different servers?

11 MR. FAHMI: I would have to go back and look at
12 the context within which that answer is given, Your Honor, but
13 I think he was --

14 JUDGE HARLOW: Well it is discussing the
15 portion of the specification we have been focused in on in
16 column 10, and it is also been discussing figure 5 and, in
17 particular, digital combiner 410.

18 MR. FAHMI: Let me see if I can find that. Can
19 you give me the cite again, please?

20 JUDGE HARLOW: Sure. I am looking at page 79
21 of Dr. Nettles' September 28th, 2016 deposition, and focusing
22 in, in particular, on line 16 through 19. But there is a bit

1 above that, that gets us -- if you scroll to page 78, for example,
2 you can see that row, the attorney, the questioner is discussing
3 the content of column 10 and the particular portions of column
4 10 we have been talking about, as well as combiner 410.

5 MR. FAHMI: So I think the operative part of this,
6 Your Honor, is to recognize that the passage is focusing on the
7 transmit side. And above on page 79 in his answer beginning
8 at line 9, he is saying that what is important is that the 80
9 megahertz stream of data is going to be broken up and
10 distributed over a variety of channels.

11 Now, at the receive side, that stream, which is the
12 stream recited in claim 1, is treated as the single
13 communication. So I don't think there is anything inconsistent
14 about that.

15 JUDGE HARLOW: Okay.

16 MR. FAHMI: So, Your Honors, Rakib never
17 suggests this type of combination from multiple channels into a
18 single data stream. And the routing circuit 86 that RPX is
19 citing as teaching the combiner limitation is simply operating
20 as a conventional router.

21 And we know this because Rakib explains in
22 paragraph 126 that routing process 86 is a conventional IP to

1 Ethernet routing process. And Mr. Koperda also confirmed
2 that a person of ordinary skill would understand that it is just a
3 conventional routing process. This is his deposition, page 78,
4 line 3 through page 80, line 15.

5 Well, as Dr. Nettles explained, routers route, they
6 don't combine. And while routers may output packets that have
7 the same destination address, in fact, this is exactly what Rakib
8 is talking about, for example, paragraphs 139 through 140, the
9 conventional routing process examines the IP packet's
10 destination addresses, looks up the corresponding Ethernet
11 address, and providing the packets to that Ethernet address, so
12 nothing unusual in that, but that is not combining them into a
13 stream as required by the claims.

14 And we can look at the two examples that Mr.
15 Koperda relies upon in his declaration in order to understand
16 the difference.

17 JUDGE HARLOW: I don't mean to interrupt, but
18 this argument basically comes down to whether we accept your
19 claim construction of "stream" or whether we agree with
20 Petitioners; is that correct?

21 MR. FAHMI: It does, yes. If you think we have
22 dealt with that enough, Your Honor, I am more than to happy

1 to move on and we can talk about whether the DOCSIS
2 reference is, in fact, publicly available.

3 Now, you heard earlier the evidence that RPX is
4 relying on, but RPX is ignoring the document itself. The
5 document itself bears a legend on its cover that says it is
6 subject to restricted access. And that's confirmed on the inside
7 cover.

8 These are produced on our slide number 7. And
9 you can see on the inside cover "public" is lined out. And, in
10 fact, distribution is restricted. And in response to our raising
11 this issue, RPX submitted the testimony of Ms. Poland, but
12 when asked, Ms. Poland stated that she wasn't the person
13 responsible for making DOCSIS specifications available on the
14 web site in the relevant time period. She wasn't responsible
15 for maintaining that web site. She wasn't familiar with the
16 structure of the web site in the relevant time period. She
17 couldn't recall if she had even visited the web site in the
18 relevant time period.

19 And, in any event, she doesn't know whether or not
20 materials such as this DOCSIS specification that had restricted
21 distribution were publicly available at the web site during the
22 relevant time period.

1 So there really isn't --

2 JUDGE HARLOW: So then setting aside
3 Ms. Poland's testimony, I recognize that there are reasons for
4 which Patent Owner would find fault with her testimony, but
5 going back to Mr. Koperda's testimony, as well as to the
6 contemporaneous patent documents and papers that cite to
7 DOCSIS, the DOCSIS specification at issue, what is your
8 response to that evidence?

9 Is it only that, well, the document that we see has
10 some boilerplate disclaimer language on it that says it is not
11 publicly available or do you have anything to refute Mr.
12 Koperda's testimony, as well as the contemporaneous
13 documents?

14 MR. FAHMI: Well, Mr. Koperda's testimony is not
15 testimony, Your Honor. He is offering a legal conclusion.
16 And, therefore, it is not evidence.

17 JUDGE HARLOW: Well, he certainly discusses in
18 his declaration that he accessed the document and that he was
19 aware of the document prior to the priority date for the
20 challenged patents, so how is that testimony a legal
21 conclusion?

22 MR. FAHMI: There is no indication as to how that

1 access was given, Your Honor. And he may be publicly one of
2 the people who was on the distribution list.

3 JUDGE HARLOW: Did you challenge that
4 anywhere in your Patent Owner response?

5 MR. FAHMI: No.

6 JUDGE HARLOW: Okay.

7 MR. FAHMI: And regarding the contemporaneous
8 documents, we heard testimony or, excuse me, we heard
9 argument earlier that somehow this is a 102(e) reference.
10 That's impossible. 102(e) applies to patents.

11 JUDGE HARLOW: Certainly. But besides the
12 102(e) argument, which I think Petitioner acknowledges is not
13 quite what they were trying to say, it seems to be the case that
14 nevertheless there is evidence that the specification was
15 publicly available as demonstrated through reference to and
16 incorporation by reference to, in various other documents.

17 Did you respond to the evidence concerning the
18 contemporaneous documents in the Patent Owner response?

19 MR. FAHMI: Not directly, Your Honor, no.

20 JUDGE HARLOW: Did you respond to it
21 indirectly?

22 MR. FAHMI: We made an observation that the

1 citations in the RFCs that Ms. Poland had testified about, she
2 did nothing to contact the authors to determine when those
3 citations were added.

4 JUDGE HARLOW: Okay. What about the other
5 contemporaneous documents, such as the patents?

6 MR. FAHMI: Well, simply because a document is
7 incorporated in a patent says nothing about its public
8 availability, Your Honor.

9 JUDGE HARLOW: Did you state that in your
10 response, anywhere?

11 MR. FAHMI: No.

12 JUDGE HARLOW: Okay.

13 MR. FAHMI: Let me turn to the other ground for
14 challenge and that is Haugli and Grindahl combination.

15 JUDGE HARLOW: Well, before you move on to
16 Haugli and Grindahl, can we discuss briefly the reason to
17 combine Rakib and DOCSIS?

18 MR. FAHMI: It is not something we raised in our
19 response, Your Honor, but I would be happy to respond to
20 questions.

21 JUDGE HARLOW: Okay. You are taking the
22 position that you are not challenging the reason to combine

1 DOCSIS and Rakib in your Patent Owner response?

2 MR. FAHMI: We didn't raise an argument that
3 they couldn't be combined, no.

4 JUDGE HARLOW: Okay. So your arguments in
5 your response are all aimed at least towards the public
6 availability when you are discussing those two references?

7 MR. FAHMI: Well, it is public availability and the
8 lack of teaching of the stream requirements that we have
9 discussed.

10 JUDGE HARLOW: The combiners?

11 MR. FAHMI: Yes.

12 JUDGE HARLOW: Okay.

13 MR. FAHMI: Turning to Haugli and Grindahl, as
14 you know, Haugli teaches a system in which the end terminals,
15 that is reference 11 in the figures receives, demodulates, and
16 decodes the data transmissions from the satellite, and each
17 terminal demodulates all of the received transmissions to
18 baseband.

19 So even RPX agrees and admits in its petition that
20 once a terminal has decoded data from the received and
21 demodulated satellite signal, that data is not output anywhere.
22 And so for that reason, they cite Grindahl, and assert that it

1 would have been obvious for the person of ordinary skill to
2 combine Grindahl somehow to implement this Ethernet
3 connection that was discussed earlier.

4 And in RPX's view, that would allow the Haugli
5 terminal to transfer data that it receives to various computers.
6 There are several problems with that argument. First and
7 foremost, the serial IO connection that is referenced in
8 Haugli's terminal is not a data output terminal. It is used for
9 programming the DSP. So it really doesn't suggest the idea of
10 even modification to an Ethernet or other type of port to allow
11 for data output.

12 Second, the combination itself is suspect because
13 both Haugli and Grindahl are directed to very different
14 systems. Haugli is directed to a system for allocating very
15 scarce bandwidth. And so what is done, as I mentioned, is that
16 each terminal receives all the data, buffers all that data,
17 demodulates all that data, and Haugli says why that's
18 important.

19 Haugli indicates that receiving, demodulating, and
20 storing all of the data provides the benefit that the channel
21 assignment information can be sent to the terminal at the same
22 time. This is discussed in Haugli at page 2, line 30 through

1 page 3, line 1 and, again, on page 10, lines 2 through 5.

2 Now, Grindahl, on the other hand, is directed to a
3 terrestrial system in which there are a large number of fixed
4 CPEs or customer premise equipment. And whereas in Haugli
5 you have a situation where all of the end terminals receive all
6 of the data, you have somewhat the opposite in Grindahl,
7 where transmissions are not even made to a particular CPE,
8 unless the transmitter determines that that data is intended for
9 that CPE.

10 Grindahl describes this by explaining that the CPEs
11 in the go learning process and then the upload information to
12 the transmit side and the transmitter keeps track of which CPE
13 is associated with which computer and ensures that it only
14 makes transmissions to a CPE if the relevant computer is
15 attached.

16 So these very different systems, we would suggest,
17 are not things that the person of ordinary skill would combine.
18 And we suggest RPX has not offered a compelling reason as to
19 why a person of ordinary skill would conclude otherwise.

20 But even if that combination would be made, look
21 at the result. The result is something different than what is
22 claimed. Because in Haugli, as I mentioned, all the data

1 frames are demodulated before any channel and use
2 information is examined.

3 And RPX has not suggested that this would be any
4 different in the Haugli and Grindahl combination. In other
5 words, in that combination, it remains the case that the
6 demodulator would demodulate all the data frames present on
7 the received signal, whether or not the controlled channel
8 message indicates the data is intended for a particular terminal.

9 So even if the combination would be made, the
10 result of the combination is something different than what is
11 claimed. And for that reason, the claims should be patentable
12 over the combination.

13 Finally, let me address one of the dependent claim
14 challenges. This is the challenge to claims 10 and 26 over the
15 combination of Haugli, Grindahl, and the Otten reference. We
16 address others, the other combinations in our papers, but just
17 for today's purposes, I would like to just address this one.

18 RPX -- this, by the way, is referenced on our Slide
19 Number 11. RPX is not relying upon Otten for any of the
20 features of the independent claims. And it doesn't -- RPX does
21 not contend that, I think, that Otten is providing any additional
22 motivation for the combination of Haugli and Grindahl, and

1 they are citing Otten only for the teaching of the separation
2 units.

3 You can see on the slide claims 10 and 26 each
4 recite the separation unit, and the separation unit is configured
5 to separate the channel carrying the IP portion from the
6 channel carrying the non-IP portion and transmits them
7 separately or differently. The IP portion is transmitted to the
8 demodulator. The non-IP portion is transmitted to an output.

9 Now, the entirety of Otten's disclosure that is
10 relevant to this is reproduced for you either on the slide, it
11 comes from column 8, lines 1 through 14. And, in particular,
12 indicates that the downlink signal has both TV signals and
13 Internet signals and that the receiver has a splitter which
14 separates those TV signals and Internet signals.

15 And, Mr. Koperda's testimony concerning this
16 passage is reproduced for you as well, and it is in his reply
17 deposition. That is Exhibit 2008 at page 16.

18 Mr. Koperda indicates that when a person of
19 ordinary skill in the art reads this passage, that person
20 understands the received signals are first received and then
21 demodulated and then split into the TV signal and Internet
22 signals. So that's different than the sequence required by the

1 claims because the claims would require the splitting to happen
2 before the demodulation. Only the IP portion is provided to
3 the demodulator.

4 So this is an example of the dependent claims
5 remaining patentable in view of the challenge. Your Honors, I
6 am happy to take further questions, if you have them.

7 In summary, though, we believe that the Rakib and
8 DOCSIS combination does not teach the combiner limitation,
9 and, in particular, does not teach combining into the same
10 stream as recited in the claims. And the Haugli/Grindahl
11 combination also fails because under that combination, even if
12 it were made, demodulation of the data frames would occur
13 before the channels are identified as containing information for
14 the subject terminal.

15 With that, and together with the arguments in our
16 papers, we will submit the matter to your judgment. Thank
17 you.

18 JUDGE HARLOW: Thank you. Counsel for
19 Petitioner, if you would like to start with your rebuttal, I
20 believe you have about 12 minutes remaining for rebuttal.

21 MR. ABRAHAMSEN: 12 minutes, okay. Let me
22 see if I can turn this on again.

1 Just very quickly on the screen issue, there is a
2 suggestion that possibly a load balance server could be
3 supplying the same content and still be a stream here. This is
4 actually figure 7 from the patent. This is slide 26.

5 And this is the one I went over with Dr. Nettles.
6 And in this example, they are not just the eight inputs coming
7 from the eight addressable devices on the left. There is also an
8 input coming from this wireless port on the bottom, which is
9 demodulated by that green box, 706, and then also fed to the
10 combiner. And all nine of those inputs at 10 megabits per
11 second are combined to create a 90 megabit stream.

12 So I don't see it plausible that it could be
13 considered, you know, that they contemplated this load balance
14 server outputting this at the same time. So that's that point.

15 The second point is on the Poland testimony, she
16 was actually asked at her deposition about that notice, that
17 boilerplate notice in the front of the document. And she said
18 when I saw that, I thought it must have been an error. I
19 thought it must have been an editing error because we always
20 publish interim specifications. And she said she has seen that
21 error made -- that same error made at other times.

22 So that was her testimony on that. And that was

1 actually addressed in our comments on their observations as
2 well.

3 If you could pull up slide 40, please.

4 The next issue relates to this purported lack of
5 technical compatibility between Haugli and Grindahl. The
6 cited portion of Grindahl that talks about limiting the
7 communication between the devices, this is actually described
8 at column 6, lines 60 through column 7, line 8 of Grindahl. He
9 talks about you have here -- we're looking at figure 3 on the
10 top of slide 40.

11 He is saying that the CPU unit, if it has a multiple
12 computer environment, was to create a table that identifies all
13 the PCs that are attached to it, and that if a PC wants to -- and
14 then that CP unit knows not to send a message over the air to
15 the base station, if a computer is in that list. Of course. It is
16 on the same local area network. So that's the reason that that
17 table is there. And that's the lack of, you know, limiting the
18 amount of traffic that was discussed.

19 The base station also has a table. And it knows all
20 the computers are attached to the CP unit 14 also. So the base
21 station knows not to send a message over the air, if there is not
22 a PC that it wants to talk to attach to it.

1 That same logic, that same technology would make
2 perfect sense in the combination we proposed, so that even in
3 the Grindahl situation or in the Haugli situation, you know,
4 PCs are not -- the fixed terminals are not communicating over
5 the air unless they have to. It is the same -- I don't understand
6 the logic of the lack of technical compatibility, I guess is my
7 point.

8 JUDGE HARLOW: So just to make sure I
9 understand what you are proposing, all of the information
10 would be transmitted from Haugli satellite 12 to the fixed
11 terminals, but then the fixed terminals would choose to
12 transmit only the necessary information over the air to the
13 added-on portions from Grindahl; is that fair?

14 MR. ABRAHAMSEN: Actually, no. Let's say you
15 have three PCs attached to fixed terminal 11 in the Haugli
16 reference on the bottom. And then one of the PCs sends a
17 message that may or may not get sent over the air. Because
18 that CPU unit knows what other PCs are attached to the same
19 device, it knows not to send that message over the air and it
20 will just send it locally.

21 JUDGE HARLOW: I see what you are saying.

22 MR. ABRAHAMSEN: And the same on the other

1 side on the base station, because they have the table, they
2 know not to send -- the base station knows not to send
3 messages over the air, unless one of the PCs it wants to talk to
4 is in its list. So the teachings are the same in both situations.
5 So I don't see the technical compatibility argument that was
6 being made.

7 Let me move on, if it is okay, to slides 42, starting
8 of slide 42. And this relates to the IO terminal and whatnot.
9 This slide really shows how close Haugli is by itself to meeting
10 this outputting to an addressable device limitation. You will
11 see on the upper right it says the DSP will extract packets and
12 output them to data processing circuitry. It doesn't say it
13 outputs the data processing circuitry in another computer, but
14 it is outputting this data, some data processing circuitry.

15 There is a serial IP port that is disclosed in Haugli.
16 Yes, it doesn't say that that could expressly be used for output.
17 The example it gives is programming it, but it is really close
18 by itself. And we think the leap from this in view of Grindahl
19 to a circumstance where you add an Ethernet connection to
20 output the data from the DSP to the data processing circuitry
21 over that Ethernet connection is not a big one. So that's the
22 purpose of this slide.

1 And on the final point, with respect to the Otten
2 combination, I don't need to go into a lot of detail about this,
3 but I think their argument about the demodulation happening
4 before the splitting or after the splitting, it really doesn't
5 matter if you agree with us that the DSP 35 is performing
6 demodulation, because no matter where you put the splitter
7 upstream of that, the splitting is happening before that
8 demodulation. So that's the only point I want to make for that
9 one.

10 And I have nothing further, but I am happy to
11 answer any other questions.

12 JUDGE HARLOW: No questions from me.

13 JUDGE CHANG: Thank you.

14 MR. ABRAHAMSEN: Thank you, Your Honors.

15 JUDGE HARLOW: Thank you. Thanks to both
16 parties for your preparation and presentations today. A final
17 written decision will be issued in due course. The hearing is
18 adjourned.

19 (Whereupon, at 2:20 p.m., the hearing concluded.)
20