

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AO KASPERSKY LAB
Petitioner,

v.

OPEN TEXT INC.,
Patent Owner

IPR2023-00124
Patent 9,578,045 B2

Held: March 14, 2024

BEFORE: GREGG I. ANDERSON, MICHELLE N. WORMMEESTER,
and AARON W. MOORE, Administrative Patent Judges.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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The above-entitled matter came on for hearing on March 14, 2024,
commencing at 1:00 p.m., via video teleconference.

P R O C E E D I N G S

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JUDGE WORMMEESTER: Good afternoon, everyone. We have our final hearing in IPR2023-00124, AO Kaspersky Lab v. Open Text Inc., which concerns U.S. Patent Number 9,578,045. I'm Judge Wormmeester. Also appearing remotely are Judges Moore and Anderson. Thank you for being here today. We want to start off by clarifying a few items. First, our primary concern is your right to be heard. If at any time during the proceeding you encounter technical or other difficulties that undermine your ability to adequately represent your client, please let us know immediately by contacting the team members who provided you with the connection information.

Second, for the benefit of the Judges, opposing counsel, and court reporter, please identify yourself each time you speak. When not speaking, please mute yourself. Third, we have the entire record, including demonstratives. When referring to demonstratives, papers, or exhibits, please be explicit and identify any slide numbers or page numbers. Finally, please note that members of the public may be listening to this oral hearing. Does anyone have concerns about that? Okay. I don't hear any concerns from either party. So let's get the parties' appearances, please. Who do we have for Petitioner?

MR. MIOTKE: Good afternoon, Your Honor. Joe Miotke, representing the Petitioner, AO Kaspersky Lab.

JUDGE WORMMEESTER: And you will be presenting the arguments, right?

1 MR. MIOTKE: That is correct, Your Honor.

2 JUDGE WORMMEESTER: Okay. Great. Thank you.

3 Welcome. And who do we have for Patent Owner?

4 MR. BLYTHE: Good afternoon, Your Honor. Russell Blythe
5 from King & Spalding, counsel for Patent Owner Open Text, Inc.

6 JUDGE WORMMEESTER: Okay. Great. Thank you.

7 Welcome both. We've set forth the procedure for today's hearing, but just to
8 remind everyone the way this will work. Each party will have 60 minutes to
9 present arguments. Petitioner will go first and may reserve rebuttal time.

10 Patent Owner will then present its response and may reserve sur-rebuttal
11 time. Please remember that the demonstratives you submitted are not part of
12 the record. The record of the hearing will be the transcript. We'll maintain a
13 clock and try to give you a warning when you're reaching the end of your
14 argument time. Are there any questions before we proceed?

15 MR. MIOTKE: None from Petitioner, Your Honor.

16 JUDGE WORMMEESTER: Great. Thank you.

17 MR. BLYTHE: None from Patent Owner, Your Honor.

18 JUDGE WORMMEESTER: Okay. All right. Well, counsel,
19 will you be reserving any time?

20 MR. MIOTKE: Yes, Your Honor. I will reserve whatever time
21 I do not use in my opening presentation.

22 JUDGE WORMMEESTER: Okay. Let me start the clock
23 here, and you can begin when you're ready.

24 MR. MIOTKE: Is my screen properly appearing?

25 JUDGE WORMMEESTER: We see it.

26 MR. MIOTKE: Thank you. Excellent. Good afternoon, Your

1 Honors. Again, my name is Joe Miotke. I represent the Petitioner AO
2 Kaspersky Lab in this IPR proceeding for Open Text, U.S. Patent Number
3 9,578,045.

4 Moving to slide 3, I will provide an overview of the '045 Patent.
5 Figure 1 from the '045 Patent, shown here in slide 3, illustrates prior art
6 forensic tools in existence when the '045 Patent was filed. This prior art
7 forensic tool used network sniffers or other type of network traffic devices to
8 collect information such as IP addresses, host names, and other relevant
9 information. As explained in the '045 Patent, an important drawback to
10 these prior art systems was the inability of these systems to establish any
11 context in the host computer itself. In other words, there was no local
12 context from within the host system or the -- in other words, there was no
13 local context from within the host system or system that generated an event
14 of interest.

15 Here on slide 4, we have Claim 1 from the '045 Patent
16 alongside Figure 2 from the '045 Patent. Figure 2 illustrates some of the
17 claimed aspects from the '045 Patent that we will discuss today, including
18 global perspective. This slide 5 provides a summary of the arguments that I
19 will address today. Please note that my presentation today will be limited to
20 Claims 1, 2, 3, 4, and 7. I will first address how the Morris patent renders
21 Claims 1, 2, and 4 obvious, focusing upon Morris's disclosure of the
22 originating object limitation. I will then address how the Capalik patent
23 renders Claims 1, 2, 4, and 7 from the '045 Patent obvious. Wrapping up, I
24 will explain how the Van Oorschot patent combined with either the Morris
25 or Capalik patents renders obvious Claim 3 from the '045 Patent.

26 Along the way, I will address the Patent Owner's arguments and

1 explain why they did not alter the correct conclusion that these claims are
2 invalid.

3 Moving on to slide 6, I will now explain how Morris alone
4 discloses Claim 1. But first, with reference to slide 7, I will provide a brief
5 overview of the Morris patent. The Morris patent discloses a community-
6 based method of classifying computer objects as malware. Referring to
7 Figure 1 from Morris, also shown in slide 7, remote computers 2, and a base
8 computer 3 are linked to a community database 7. Moving on to slide 8, the
9 Board properly found a reasonable likelihood that Claim 1 was invalid in
10 view of Morris. Recognizing that the Board applied a lower standard of
11 reasonable likelihood than the preponderance of the evidence standard it will
12 apply in its final written decision here. Petitioner is confident that it is more
13 than demonstrated by a preponderance of the evidence that Morris discloses
14 all limitations of Claim 1 rendering it invalid as obvious. Amplifying why
15 Petitioner has this confidence, as illustrated in slide 9, Patent Owner admits
16 that Morris discloses everything recited in Claim 1, except for generating a
17 contextual state for at least one or more events by correlating the at least one
18 event to an originating object. And Morris discloses this originating object
19 limitation.

20 Referring now to slide 11, Patent Owner is incorrect when it
21 argues that GenesisActor is not an originating object within the scope of the
22 claim. Stepping back, there is no dispute that the GenesisActor is the
23 ultimate parent or object of the event being performed. This is explicitly
24 stated in paragraph 107 of Morris. By way of analogy, in the context of a
25 grandparent, parent and child, the grandparent is the GenesisActor in this
26 chain. Continuing with this analogy, because the grandparent is a previous

1 event, it would constitute an originating object as recited in Claim 1. On to
2 slide 12, Patent Owner seeks to evade this conclusion that a GenesisActor is
3 an originating object as recited in Claim 1 through reliance upon an
4 improperly narrow proposed construction for originating object.
5 Specifically, Patent Owner seeks to construe originating object as an object
6 that directly initiated or otherwise created the first object. This improper
7 construction is not consistent with the '045 specification, is not required by
8 Claim 1, and conflicts with the plain and ordinary meaning of originating
9 object as used in the '045 Patent. As illustrated in this slide 13, the '045
10 specification includes multiple statements indicating that there can be
11 multiple originating objects. Among the best examples is the statement at
12 column 12, lines 57 to 59 of the '045 Patent, stating, for example, “the
13 context analyzer 348 may correlate an actor, victim, and/or event type to one
14 or more originating processes, devices, and users.” Key here is the plural
15 language, “one or more originating processes.”

16 On to slide 14, the Patent Owner distorts the '045 specification
17 by relying upon an incomplete statement from the specification. Patent
18 Owner notably omits from this passage the key term “may,” indicating the
19 passage illustrates a permissive and not mandatory embodiment. There's no
20 basis in the '045 specification to narrow the claim scope to only the object
21 that directly initiated or otherwise created the first object. The '045
22 specification teaches that an originating object is merely a previous event
23 and not the immediately preceding event. As the Patent Owner
24 acknowledged during the hearing regarding the '224 Patent, a continuation
25 of the '045 Patent at issue here, if only two objects were involved, such as a
26 parent and child, the parent would be both the originating object and the

1 GenesisActor. The same analysis applies here and a GenesisActor, as
2 disclosed by Morris, falls within the scope of the claimed originating object.
3 Morris alone discloses all limitations of Claim 1, and Patent Owner does not
4 dispute that Morris discloses the limitations of Claims 2 and 4.

5 Turning to slide 19, I will now explain how the Capalik patent
6 renders Claims 1, 2, 4, and 7 obvious. Slide 20 provides an overview of the
7 Capalik patent. With reference to Figure 1 from Capalik, shown here in
8 slide 20, Petitioner's expert, Dr. Lee, explains in Exhibit 1003, paragraph 70,
9 that Capalik discloses an exemplary distributed system. Continuing at
10 paragraph 3 of his declaration, Dr. Lee explains that one skilled in the art
11 would understand that Capalik's disclosure could be used to monitor one or
12 more systems. Capalik discloses a decoy computer network 102, and within
13 that network, Capalik discloses a decoy network device 106. This decoy
14 network device 106 collects information seeking unauthorized or malicious
15 activities to protect one or more of the systems.

16 Now, at slide 21, Patent Owner's sole argument concerning
17 Capalik is incorrectly asserting that Capalik does not disclose the global
18 perspective across a limitation of Claim 1 of the '045 Patent. As illustrated
19 in this slide 22, everything highlighted in yellow is not disputed by Patent
20 Owner in its briefing. Patent Owner's sole dispute here relates to what I will
21 call the global perspective across a network limitation. Referring to slide 23,
22 Patent Owner asserts that Capalik has a virtualized operating system, but it's
23 only on one device. Because Patent Owner asserts this system is only on
24 one device, Patent Owner asserts that it cannot be across the network. The
25 Board applied the same rationale in its decision to institute.

26 Now, onto slide 24, I would like to explain how both the Patent

1 Owner and the Board were mistaken regarding the application of Capalik
2 here. Shown here is a partial Figure 1 from Capalik, which is Exhibit 1008.
3 As explained by Dr. Lee in his declaration at paragraph 70 and made explicit
4 by Capalik, Figure 1 is exemplary when it makes reference to decoy
5 computer network 102. As I'll explain with reference to some upcoming
6 slides, Capalik explicitly provides for alternatives where there is more than
7 one decoy network device 106, and examples where functional elements are
8 placed into separate systems or components. What this means is that there
9 can be two network devices. As quoted on slide 25 with reference to Figure
10 1, paragraph 30 of Capalik states that the decoy computer network includes
11 one or more decoy network devices.

12 Taking a step back for a moment, we also note that Patent Owner
13 has objected to this slide 25 as well as slides 26 to 29. Patent Owner argues
14 that these slides are improper because the figures were not included in the
15 Petition. While we agree that the figures were not included in the Petition,
16 these slides are only demonstratives, not evidence. These slides are
17 properly included as demonstratives because they visually demonstrate what
18 is stated and described in the Petition and Petitioner's reply. In addition,
19 Patent Owner asserts in its sur-reply that Petitioners --

20 JUDGE WORMMEESTER: Counselor?

21 MR. MIOTKE: Yes, Your Honor.

22 JUDGE WORMMEESTER: I'd like to interrupt you for a second
23 here. In your briefing, in the reply brief, you know, just before you -- the
24 analysis unfolds here, I just want to make sure I understand how you are
25 applying Capalik here based on the claim language. So, I'm going back to
26 your slide 22, which I think shows Claim 1 of the '045 Patent, and the

1 unhighlighted portion says “wherein the global perspective for one or more
2 related events to the at least one event across a network,” right?

3 MR. MIOTKE: Yes.

4 JUDGE WORMMEESTER: Okay. So, in your reply, let me just
5 get there real quickly. I think you stated that Claim 1 actually recites
6 “wherein the global perspective for one or more related events relates to, the
7 at least one event across a network,” which is--this language doesn't match
8 what's shown on your slide. And also what's actually in the claim in the '045
9 Patent. And so I just--before we move on, I want to clarify the arguments in
10 the reply, are they talking about this language here “relates to” that's been
11 discussed in the reply? I'm on page 14 of the reply.

12 MR. MIOTKE: I'm right there, Your Honor. Yes.

13 JUDGE WORMMEESTER: Okay. So the first sentence of the
14 second full paragraph -- “the language omitted by Patent Owner's selective
15 quotation is instructive. Claim 1 actually recites ‘wherein the global
16 perspective for one or more related events relates to the at least one event
17 across a network.’” Okay. And just above that, the last sentence, okay, of
18 the first full paragraph, Petitioner says -- I'm kind of at the second part of
19 that paragraph. “Patent Owner implies that the limitation requires the global
20 perspective use or incorporate events from other devices on a network. Not
21 so,” according to Petitioner. But if we go back to the Petition, I think it is on
22 page 50 of the Petition, it says at the first paragraph under the section
23 discussing this limitation, the global perspective limitation: “Petitioner
24 assumes this limitation requires the global perspective to include information
25 about events across the network and that those events occur on other devices
26 on the network.”

1 So I just want to understand, you know, how the arguments in the
2 Petition are supported by the arguments in the Reply. And if you could spell
3 out what Patent Owner has wrong in its application of its understanding of
4 that limitation is.

5 MR. MIOTKE: Oh, certainly.

6 JUDGE WORMMEESTER: That's what I'm looking for.

7 MR. MIOTKE: Yeah, absolutely, Your Honor. So I think perhaps
8 to step back, part of the disconnect with the language in the reply brief you
9 initially cited and the language being shown up here on the screen, is that
10 there is a -- there was a typo in -- there was an error in this claim limitation.
11 Let me just find this in the -- I believe it's spelled out in the Petition. Here
12 we go. I believe it's in the Petition, which is paper 1, at page 5 is where we
13 explain that, you know, the parties acknowledge that there is an error in this.
14 You know, there was an error in the limitation itself. And here for purposes
15 of this proceeding we're applying the -- we're applying the construction as
16 proposed by the Patent Owner.

17 JUDGE WORMMEESTER: Right, which would use the events in
18 other devices, right? It's just the Reply seems to suggest that now you're
19 saying that's not the right interpretation.

20 MR. MIOTKE: No, our Reply--we are not departing from what
21 we specified in the Petition.

22 JUDGE WORMMEESTER: Okay. So --

23 MR. MIOTKE: And, oh, go on, go ahead, Your Honor, I didn't
24 mean to interrupt.

25 JUDGE WORMMEESTER: So does the global perspective
26 include events from other devices on a network?

1 MR. MIOTKE: I believe that is correct, and also I will get to that
2 in the slides. I believe I'll walk through that in more detail very shortly. If
3 that -- if that will be helpful.

4 JUDGE WORMMEESTER: Okay.

5 MR. MIOTKE: And then one last point before I continue on with
6 the slides, just also wanted to note that the Petitioner also asserted that the
7 arguments that are -- Patent Owner is arguing that the arguments Petitioner
8 made in its reply are not proper because they're new arguments. But again,
9 Patent Owner disagrees with that and very briefly is noted in the Federal
10 Circuit's 2022 decision of Everstar Merchandise Company Limited v. Willis
11 Electric Company Limited, 2022 West law 108, 9909 at 4, just quoting a
12 Petitioner is entitled in its reply to respond to arguments raised in the
13 corresponding opposition, Patent Owner preliminary response, Patent Owner
14 response, or decision on institution. Any ambiguity as to whether a reply
15 constitutes a new argument is eliminated when the reply is a legitimate reply
16 to arguments introduced in a Patent Owner's response or the Board's
17 institution determination. And just pointing out that here, Petitioner is
18 properly responding to arguments raised in both the Patent Owner's response
19 and the decision on institution. And moreover, Patent Owner is not relying
20 upon any new evidence and instead is relying upon the very same prior art
21 reference and declaration by Dr. Lee cited in the Petition.

22 So with that, up to -- so now stepping back, and I believe that this
23 is going to address the question that you just raised, Your Honor. So
24 looking now at slide 26, as we previously saw on slide 25, Capalik discloses
25 two separate network devices. Looking now at this slide 26, Capalik
26 explains at paragraph 52 the inclusion of virtual machines, which are one or

1 more software applications that emulate one or more physical machines. For
2 example, these physical machines can be computer systems. We further
3 note that this paragraph 52 from Capalik was cited by Patent Owner in its
4 preliminary response at page 61, and in its response at page 30. So here we
5 are in agreement with the Patent Owner regarding what Capalik discloses.
6 Specifically, that Capalik discloses virtual machines to emulate different
7 computer systems. Put differently, there appears to be no dispute that
8 Capalik discloses using multiple virtual machines to emulate multiple
9 devices.

10 Moving to slide 27, the same analysis applies with respect to
11 Capalik's disclosed virtual operating systems. Multiple operating systems
12 are disclosed because each of the two decoy network devices would have a
13 virtual machine running a virtual operating system. Tying everything
14 together, here at slide 28, and as explained in the Petition at pages 50 to 52,
15 and quoting from paragraph 130 of Capalik, Capalik's analysis is able to
16 follow a chain of unauthorized events across multiple virtual operating
17 systems, across multiple virtualized operating systems. And Capalik further
18 emphasizes that following this chain is important in identifying and
19 thwarting advanced threats that involve multiple attackers spread across
20 multiple systems. So again, Your Honor, I believe coming back does this
21 answer your question about the explanation for applying Capalik across
22 multiple devices?

23 JUDGE WORMMEESTER: I just, I don't understand your
24 sentence, "Patent Owner implies that the limitation requires that the global
25 perspective use or incorporate events from other devices on a network. Not
26 so." And then it seems that the rest of your argument on Capalik has to do

1 with this “relates to” language that's been introduced in the Reply, that
2 actually doesn't appear in the claim language. The arguments are implying
3 that there's a different connotation, a different meaning to the claims when
4 the term “relates to” is part of the claim. And I'm on page 14 of the Reply
5 there.

6 MR. MIOTKE: Yes, Your Honor. Okay. And just to clarify and
7 your question about this, Your Honor, is are you asking are we applying a
8 different construction now from what we applied in the original Petition?

9 JUDGE WORMMEESTER: Yes. Because that's what it seems to
10 me.

11 MR. MIOTKE: So, I don't understand or I should say, I don't
12 interpret our analysis here as applying a different construction. And again, I
13 believe our explanation here at page 14 is demonstrating how a POSITA
14 would understand the teaching of Capalik to show how the monitoring of the
15 decoy devices would be understood to be monitoring across a network.

16 JUDGE WORMMEESTER: Okay.

17 MR. MIOTKE: Does that answer your question, Your Honor?

18 JUDGE WORMMEESTER: I mean, I think it does, that you are --
19 you are applying the construction that was articulated in the Petition.

20 MR. MIOTKE: Correct.

21 JUDGE WORMMEESTER: Okay, regardless of what the Reply
22 says.

23 MR. MIOTKE: Correct.

24 JUDGE WORMMEESTER: Okay. Thank you.

25 MR. MIOTKE: Now, moving on to slide 33, Morris or Capalik in
26 view of Van Oorschot renders Claims 1 through 4 and 7 obvious. As for a

1 brief overview here at slide 34, Van Oorschot discloses an event
2 management system that records a variety of system events initiated by a
3 user. This event management system provides a comprehensive security
4 overview of activity within a given computer system, allowing a forensic
5 statement of activity to be generated. Van Oorschot describes policy rules
6 that can identify an event as a threat and assign a severity level for the threat.
7 As I explain with the next few slides, like the '045 Patent, Van Oorschot
8 discloses assigning a severity level to system events based on attributes 140
9 to determine an event priority. Notably, one of the attributes used to assign
10 the severity level is Who, identified as user one, as shown here in Figure 5B.
11 This Who attribute is important to Claim 33 of the '045 Patent. So I will
12 come back to this Who attribute in a few slides.

13 As shown on slide 35, Patent Owner asserts that Van Oorschot's
14 severity level cannot be the claimed event priority because it is not based on
15 generated contextual state information that includes an indication of the
16 originating object. These disputed limitations are highlighted in green here
17 on slide 35. Moving on to slide 36, Van Oorschot discloses assigning a
18 severity level based on the generated context related to an event. As
19 explained further in the Petition at pages 27 and 28, Van Oorschot explains
20 that the event data and contextual data associated with an event are divided
21 into groups. The groups are assigned a significance factor, and this factor is
22 used for subsequent assignment of a severity level for the patent. As
23 explained in the Petition and highlighted here in slide 37, this severity level
24 disclosed by Van Oorschot is the event priority recited in Claim 3.

25 Moving on to slide 38, Van Oorschot discloses that the attributes
26 pertaining to an event disclose context for the event. As explained in the

1 Petition at pages 27 to 28 and 57 to 58, along with paragraphs 63 to 67 and
2 200 to 204 from Dr. Lee's declaration filed with the Petition and illustrated
3 in Figure 5B of Van Oorschot itself, these attributes include the Who, which
4 may be a user that creates a file. But going back to slide 34, we again see
5 that a user, here identified as User 1, is specifically illustrated as an attribute
6 used to generate a severity level. When a user creates a file, then this user is
7 an originating object as recited in Claim 1.

8 Stepping back, the event priority, referred to as a severity level in
9 Van Oorschot, is then based upon the generated context because this context
10 is based upon an originating object. Again, here, illustrated as a user in
11 Figure 5B. As highlighted in slide 39, Patent Owner is incorrect that Van
12 Oorschot's severity level does not include the claimed generated context
13 because it is not based on any correlation using an originating object. First,
14 in its Sur-reply, Patent Owner does not dispute that Van Oorschot's disclosed
15 attributes for the event include a user. Second, Patent Owner is incorrect
16 when asserting that Petitioner has identified no support for a user being an
17 originating object. Petitioner specifically cited to the following, all of which
18 support a user constituting an originating object. Specifically, Petitioner
19 cited Van Oorschot at column 7, lines 12 to 27, which states at lines 14 and
20 15 within this portion that “the Who attribute may include groups related to
21 the various forms of users, such as network administrators or general users.”
22 In addition, Patent Owner cited to the Petition at pages 57 to 58, which then
23 cites back to pages 27 to 29, specifically including an annotated
24 reproduction of Figure 5B from Van Oorschot and stating at page 28 the
25 following about Van Oorschot: “These rules focus on permitted or abnormal
26 activity related to certain attributes, such as Who, e.g., only system

1 administrators are permitted to modify files or Where, types of clients at
2 which the events can occur, i.e., the generated contextual state discussed
3 above in Claim 1.”

4 So, stepping back and breaking down this statement from the
5 Petition, the Who, i.e., the user, is a type of generated contextual state data
6 and then tying this back to Claim 1 indicates that this contextual state data is
7 based upon an originating object. Dr. Lee's declaration, at paragraphs 200 to
8 204 and 63 to 67, is cited in the Petition, and paragraph 65, quotes Van
9 Oorschot, lines 14 to 23, stating, the event management tool then normalizes
10 this data, capturing the following attributes. Who, (the user initiating the
11 event). But I do note that in Dr. Lee's declaration, he included a typo that
12 stated client instead of user as is correctly stated in Van Oorschot.

13 Finally, Patent Owner further argues that Petitioner conflates the
14 first object in an event with an originating object. But again, Patent Owner
15 is incorrect. When the first object is the very first object in the chain, then it
16 is the originating object. In other words, when the first object is the first
17 object in the chain, the originating object of the first object is the first object
18 itself. So again, summarizing, Morris or Capalik combined with Van
19 Oorschot, accordingly, renders Claim 3 obvious.

20 JUDGE MOORE: Counsel?

21 MR. MIOTKE: Yes.

22 JUDGE MOORE: This is Judge Moore. What in the combination
23 is the event line?

24 MR. MIOTKE: I believe stepping back in the combination, we
25 explained that the event line is as disclosed in the Morris or the Capalik
26 reference. And that then when the severity level as taught by Van Oorschot

1 is then incorporated into that event line.

2 JUDGE MOORE: I understand. But what in Morris is, you know,
3 what in Morris does the event line limitation read on? Where is that in
4 Morris?

5 MR. MIOTKE: Where is that in Morris? If you give me one
6 moment. So, Your Honor, I'm stepping back to Paper 1 of the Petition
7 which -- or Paper 1, which is the Petition at page 23 where we -- page 24
8 where we're describing transmitting the assembled event line. So we've got
9 the event line being described in Morris at 84. At paragraph 84 of Morris.
10 And then I believe we move on to Capalik. Bear with me.

11 JUDGE MOORE: Let's just talk about Morris. Morris paragraph
12 84 is about how if the community -- the community database has been
13 searched and the object is still unknown and it's a new object. And the
14 remote computer -- the signature from the remote computer is then copied
15 into the community database. Is that right?

16 MR. MIOTKE: I believe that's correct, yes.

17 JUDGE MOORE: Okay. And why would it have been obvious to
18 add the priority to that?

19 MR. MIOTKE: Well, I believe based upon the teaching of Van
20 Oorschot being directed right in, you know, the same field, similar
21 technology. And then with, you know, Van Oorschot explaining that now
22 severity level is another attribute being transmitted to the base computer.
23 That would have been included in the event line as taught by Morris.

24 JUDGE MOORE: Okay. So the local computer decides -- or
25 the -- what is it called? The remote computer decides that a particular event
26 that it does not know about, and that the mini database does not know about,

1 is a priority event?

2 MR. MIOTKE: I want to be careful answering that last portion of
3 your question. Could you state that again, Your Honor?

4 JUDGE MOORE: Yeah. So in paragraph 84, the situation is that
5 the local computer wasn't aware of the object, right? Because that's why it
6 sent it up to the base computer. And in paragraph 84, the base computer
7 doesn't know about it either. So I'm a little unclear why, if neither of these
8 computers knows what this event is, why it would be a priority event.

9 MR. MIOTKE: Because, Your Honor, I believe from there, that's
10 where in Van Oorschot, I believe it's the remote computer of Van Oorschot
11 that it takes the various attributes among one of them, which is it's severity
12 level, which equates to the event priority. So I believe that's where it's
13 performed in Van Oorschot. Does that answer your question?

14 JUDGE MOORE: I suppose. But how is it known to be severe or
15 priority if neither system knows what it is?

16 MR. MIOTKE: And I believe that's where, you know, Van
17 Oorschot is teaching about, you know, using its parameters and then making
18 the determination.

19 JUDGE MOORE: Okay.

20 MR. MIOTKE: Any further questions, Your Honors?

21 JUDGE WORMMEESTER: I have a question going back to your
22 Morris based grounds. You know, throughout the briefing, the parties went
23 back and forth quite a bit about claims 8 and 16, the sensor agent. And I was
24 just wondering, are you still challenging those claims? Because you haven't
25 discussed them.

26 MR. MIOTKE: We are still challenging the claims, but, you

1 know, standing on the briefing with respect to that.

2 JUDGE WORMMEESTER: I would like to ask a question on that
3 though. Just one aspect of it is Patent Owner seems to think that for the
4 generating contextual information by correlating an event to an originating
5 object, that the generating the contextual information is happening at the
6 remote computer, whereas the correlating is happening at the base computer.
7 I just want to understand your response to that.

8 MR. MIOTKE: So I refer Your Honor to pages, specifically 9
9 through 11 of our Reply. Is there anything about our statements in the Reply
10 that's not answering your question?

11 JUDGE WORMMEESTER: Well, why don't you just walk me
12 through what your reply is on that issue.

13 MR. MIOTKE: So I believe as we start, you're on page 9 that
14 we've got in Morris. The data sent to the base computer 3, which is the data
15 collected by -- we identify what the data is that's collected and sent to the
16 remote computer. Moving on page 10, we're explaining that paragraph 87 of
17 Morris is making clear that the events initiated by or involving the object
18 when the object is created, configured, or runs provide the contextual state
19 information for the event, including the originating object of the first object.
20 Is there a further explanation I can offer, Your Honor?

21 JUDGE WORMMEESTER: I think that's okay.

22 MR. MIOTKE: Very good.

23 JUDGE WORMMEESTER: Okay. That's all I have for now at
24 this point. Does anyone else have any questions? And do you have
25 anything else to say, Mr. Miotke?

26 MR. MIOTKE: I am through, Your Honor.

1 JUDGE WORMMEESTER: Okay. Good. So we stopped at 44
2 minutes, which will give you 16 minutes left in rebuttal.

3 MR. MIOTKE: Thank you.

4 JUDGE WORMMEESTER: Okay. Counsel, will you be
5 reserving any time for sur-rebuttal?

6 MR. BLYTHE: Yes, Your Honor. I'd like to reserve whatever
7 time is left for sur-rebuttal.

8 JUDGE WORMMEESTER: That's fine. You can start when
9 you're ready.

10 MR. BLYTHE: All right. May it please the Board. The Petitioner
11 today covered some of the basic background information for the '045 Patent.
12 But there are a few points that I would like to highlight as we get started.
13 The first, the '045 Patent is entitled "Method and Apparatus for Providing
14 Forensic Visibility into Systems and Networks." And as that title suggests,
15 the '045 Patent includes both method and system claims. And of the claims
16 challenged in the Petition, Claims 1 through 4 and 7 are method claims.
17 And these all depend from Claim 1, which is shown in slide 3. And Claims
18 8 and 16 shown in slide 4 are system claims. And of the claims challenged
19 in the Petition, that includes Claims 8 through 10, 12 and 15 through 18.
20 Those are all the system claims.

21 Now, like the Petition that we discussed a few weeks ago in
22 connection with the related to '224 Patent, the Petition here for the '045
23 Patent also focuses on Claim 1 in its analysis, which is just the method
24 claims, and it addresses the system claims by generally cross-referencing
25 back to the analysis for the method claim in Claim 1. But there are
26 important distinctions between the method claim and Claim 1 and the system

1 claims in Claims 8 and 16 that we'll get to today. And I find it interesting
2 the Petitioner's presentation was curiously truncated in connection with the
3 system claims given those significant differences which again we will
4 address today.

5 So as an overview the Petition has two grounds. The first ground
6 is based on Morris, and as I'll address in some detail, that ground fails for
7 various reasons. First being that Petitioner relies on Morris's reference to
8 the GenesisActor as teaching the originating object limitation. But the '045
9 Patent treats the originating object and the GenesisActor as two different
10 pieces of information. Therefore, Petitioner cannot show that the
11 GenesisActor is the originating object required by the claims. And this
12 argument applies to all of the claims of the '045 Patent, both the method and
13 the system claims. And therefore, Ground 1 may be rejected in its entirety
14 based solely on the originating object argument.

15 The next two positions presented by Patent Owner relate to the
16 system claims. First, the Petitioner fails to identify a single device in
17 Morris that includes a sensor agent that is required by the system claims.
18 The sensor agent has to meet certain limitations and the Petition fails to
19 identify how a single device does that. Third, the Petitioner fails to show
20 that Morris discloses a sensor agent transmitting an event line to an end
21 recipient device, which is required by Claim 10 of the '045 Patent.

22 And then turning to Ground 2, Ground 2 is based on Capalik.
23 Capalik describes using a self-contained decoy device as a honeypot to
24 monitor attacker activity. Petitioner does not meet its burden to prove that
25 Capalik disclosed a global perspective that is one or more other events
26 across a network. In its institution decision, the Board agreed with Patent

1 Owner. The Petitioner failed to show that Capalik addressed the across-the-
2 network limitation. And I'll address that in more detail today, as well as
3 getting into a little bit of what the correct claim language is, as Judge
4 Wormmeester was asking about during Petitioner's presentation.

5 Finally, in connection with both Ground 1 and Ground 2, Van
6 Oorschot is what the Petitioner relies on in combination with Morris or
7 Capalik for Claim 3. But Van Oorschot does not render obvious an event
8 priority based on an originating object. So, Claim 3 is patentable for that
9 additional reason. So, with that framework in mind, I'll turn now to
10 addressing each of these deficiencies in more detail, and we'll begin with
11 Patent Owner's arguments regarding Morris and the originating object
12 limitation that appears in all of the challenged claims for Ground 1.

13 All right. So, in the claims an event defines an action of a first
14 object acting on a target. The claims also require a contextual state that
15 includes an indication of the originating object of the first object. So the
16 heart of the parties' dispute is whether the originating object is a genus that
17 includes the GenesisActor, or whether the originating object and the
18 GenesisActor are two different pieces of information, and as this issue has
19 developed over the course of the Petition and institution decision, it has
20 become clear that this is really a claim construction dispute. The claim
21 limitation originating object must be read as it would be interpreted by a
22 person of ordinary skill in the art in view of the specification. And from the
23 very beginning of the '045 Patent, the specification makes clear that the need
24 it is addressing is a solution that will allow for end-to-end visibility of every
25 event within a system with the goal of eliminating guesswork to see how
26 malware is impacting a local device. And the solution taught in the '045

1 Patent involves an audit trail that allows for this end-to-end visibility of
2 every event. Now, the claims do not explicitly recite the term audit trail, but
3 that context is important to understanding the claim terms that are included
4 in each of the claims for originating object and GenesisActor in particular.

5 Now, the specification states that the originating object may be
6 determined based on a previous event that initiated or otherwise created a
7 current process and/or object. This is what allows for creating the audit trail.

8 Now, in contrast, the GenesisActor is the ultimate parent of the event being
9 performed. And it's particularly relevant to the dispute here that the

10 specification treats the originating object and the GenesisActor as two
11 separate pieces of information. As shown in slide 8, the specification says
12 that contextual state information may include originating processes, and
13 additionally may include GenesisActor information. The specification also
14 refers to the GenesisActor as a further supplement to the context. If the
15 GenesisActor was merely an example of an originating object, then the '045
16 Patent would likely have indicated that somewhere. But that's not what it
17 says. The '045 Patent does not include any suggestion that the GenesisActor
18 is an example of an originating object. Rather, the GenesisActor is
19 consistently presented as a separate piece of information. As shown in slide
20 9, Figure 5B makes this clear. In figure 5B, the originating process, which is
21 used interchangeably throughout the '045 Patent with the term originating
22 object, is listed separately from the GenesisActor. In particular, the
23 contextual state, or 524, for each event, 520B, 516B, et cetera, includes
24 separate entries for originating process and GenesisActor. This gives two
25 useful bits of information. The first, when the '045 Patent intends to use
26 terms interchangeably, it does that clearly with originating process or object.

1 Again, at no point in the '045 Patent is the GenesisActor used
2 interchangeably with an originating object or process. And second, the
3 GenesisActor is a separate field from the originating process and the
4 contextual state information for events. Again, this is consistent with other
5 portions of the specification, which describe the originating object based on
6 initiating or creating the current process or object, whereas the GenesisActor
7 is the ultimate parent determined based on a chain of events. This is
8 important because the GenesisActor and the originating object provide
9 fundamentally different information. And that in the context of the '045
10 Patent, we were looking to create an audit trail and end-to-end visibility of
11 the system is key.

12 When we met a few weeks ago about the '224 Patent, we discussed
13 a sort of an example in a different context that may be a little easier to
14 follow if you had this scenario where you lost your car keys and you wanted
15 to trace back yourself to try to figure out where your car keys came from.
16 What you would do is think when did I have my car keys last? I had my car
17 keys when I got back from lunch. I had my car keys when I came into the
18 office. I had my car keys when I got out of the car, and so forth, creating
19 essentially in parallel here an audit trail to figure out what has occurred. If
20 instead all you knew was well I got the keys from the car dealer when I
21 bought the car that would not be particularly helpful nor would it identify
22 sort of an end-to-end visibility of what happened in the process of
23 determining how or where you lost your car keys. Now in the unusual
24 circumstance in which you lose your car keys as you walk out of the
25 dealership it may be that the only event before losing your car keys was
26 getting them from the dealer, but you're still looking at two different pieces

1 of information. You're looking at what happened immediately before or
2 you're looking at what happened originally.

3 And just one other way to think about this that I've been thinking
4 through as well. Sometimes we get the question as attorneys what caused
5 you to go to law school? Right? And typically the answer to that may be
6 well I took a particular class in college that was interesting. Follow up
7 question might be well why did you take that class? Why did you go to that
8 college? What led you to go to that college? What classes did you take in
9 high school and so forth, creating essentially a history of what occurred
10 leading up to the decision of interest. A different question would be, when
11 were you born? Well if you were born in 1975 that might be the answer to
12 the question.

13 Those are two very fundamentally different pieces of information.
14 What caused you to go to law school? When were you born? Now
15 eventually if you trace the what caused you to go to law school question
16 back far enough it may get to being born in 1975 or whatever the answer is
17 to the other question. But those are two fundamentally different pieces of
18 information that are being explored as you try to trace back starting from one
19 event through a history of events to see what has occurred and led to the
20 event of interest. That's what's going on with an originating object and a
21 GenesisActor. Two fundamentally different pieces of information. And
22 that's why it's important that they be construed to reflect that difference.

23 Now as shown in slide 11 the Petition relies on Morris's reference
24 to GenesisActor information as disclosing the originating object, but
25 properly construed there should be no dispute that the Petitioner's reliance
26 on the GenesisActor in Morris does not teach the originating object in the

1 challenged claims of the '045 Patent. Morris describes the GenesisActor in
2 similar terms to the '045. Morris states that the GenesisActor is the ultimate
3 parent of the event being performed, but again that is different than the
4 originating object for the reasons that we have discussed. Jumping to the
5 ultimate parent of an event will leave gaps in the audit trail, which is a
6 problem with the '045 Patent sought to solve. Petitioner's reliance on the
7 ultimate patent --

8 JUDGE WORMMEESTER: Counsel?

9 MR. BLYTHE: Yes, Your Honor.

10 JUDGE WORMMEESTER: Sorry. But it's not true I don't think
11 from my reading of the '045 Patent that you always need to consider the full-
12 - every single piece of information, right? So on page, I'm sorry, column 12,
13 for example, line 52, it says "the context analyzer 348 ensures that a user at
14 the end recipient is provided with the deepest view of the most important
15 data, but still has access to the full range of data if they wish to see it." So,
16 you know, and then I guess later, with respect to the figure that you brought
17 up, I think it was Figure 5B at column 17, 17 line 35, it says, "although
18 illustrated as including an originating process, GenesisActor, device, and
19 user, the contextual information forming the contextual state may include
20 more or less information and in varying combinations." So I mean, reading
21 those two together, I think it contemplates, you know, a GenesisActor could
22 be the originating object or process. And I think we've discussed before that
23 it could be a species of the originating object or process, right? And I just
24 want to take you to one more part of the '045 Patent at the abstract here.
25 Let's see, one, two, three, four lines down starting with the first full
26 sentence: "The object, the event, and the target are then correlated to at least

1 one originating object,” which suggests that it's not-- the originating object
2 doesn't necessarily refer to just the direct actor, right? Or it doesn't
3 necessarily refer to just the GenesisActor, but it could refer to any object in
4 that chain that was involved with the current object or process at issue.
5 That's kind of how I'm reading it. What is your take on those excerpts?

6 MR. BLYTHE: Okay. Yes, thank you, Your Honor. Great
7 question. A couple of things to unpack. I guess first I would want to make
8 clear that we do not agree that the GenesisActor is a species of an
9 originating object genus. We don't think that's correct. I think one might be
10 able to think about it that way if those terms appeared in the abstract, not in
11 the context of the specification of the '045 Patent. I mean you could
12 formulate something in your mind where you have originating objects as a
13 category and GenesisActor as a species. But that formulation is simply
14 inconsistent with what is in the '045 Patent, and the term originating object
15 has to be construed, has to be construed in view of the specification. Okay?
16 So we'll start there, and then let's look at some of the specific excerpts that
17 you looked at and I think I got them all, but if I didn't I may get some help.

18 So looking at I think first column 12 starting around line 51 refers
19 to the context analyzer module. I think that this section actually indicates
20 why it's important that you do have the entire audit trail information where it
21 refers to having either the deepest view of the most important data but still
22 has access to the full range of data if they wish to see it. I'm not sure how
23 you would have access to the full range of data if you don't have each step of
24 the audit trail along the way. In fact, that paragraph goes on to refer to that
25 in particular. It refers to correlating an actor or a victim and/or event type to
26 one or more originating processes, devices, and users, correlation creates an

1 audit trail for each individual event.

2 As will be described later, this audit trail allows an administrator at
3 an end recipient 220, for example, to forensically track back any event
4 which occurs to what triggered it. Accordingly, this additional information,
5 including the originating processes, devices, and user, allows a contextual
6 state to be established for each event. I think that full paragraph suggests
7 that you do need the object that created the current event, the originating
8 object, in order to create that audit trail.

9 Turning then to column 17 --

10 JUDGE WORMMEESTER: Sorry. Is there a term for, so we
11 know GenesisActor is the parent actor, right? And then in your view, the
12 originating object is the direct actor, right?

13 MR. BLYTHE: It is the object that created the direct actor.

14 JUDGE WORMMEESTER: Okay.

15 MR. BLYTHE: So the first object, I think, would be the direct
16 actor. An event is the action of a first object --

17 JUDGE WORMMEESTER: Okay. Okay.

18 MR. BLYTHE: -- taking on a target, correct? So the originating
19 object would be what created that first object in the language of the claim.

20 JUDGE WORMMEESTER: Okay. And what are all the objects
21 that created that object in the chain? Like going back, what is everything in
22 between that and the GenesisActor?

23 MR. BLYTHE: I think that gets me to one of the other excerpts
24 that you asked about. It's a great transition because at times you will see in
25 the '045 Patent references to sort of one or more originating objects. I think
26 that's shown in Figure 5B where you, you know, you may have a series of

1 events that goes back 10 generations, and so there may be more than one
2 originating object in that audit trail. So you would have the first object, you
3 have the originating object for that first object, and then an originating object
4 before that, and an originating object before that, depending on how long the
5 string of events is. But what you're looking at in the terms of the claim for
6 the originating object at each step is the object that created the object or
7 event that you're looking at in the analysis, and that's how you get the full
8 audit trail. Otherwise, you don't get the full audit trail because you're
9 jumping around or jumping just all the way to the very end. And so I think
10 Figure 5B shows that.

11 I would also say in column 17 where it refers to the contextual
12 information, including more or less information, I think this supports the
13 Patent Owner's position as well because this entire paragraph in column 17,
14 lines 30 through 50, is referring to the originating object and the
15 GenesisActor being two different pieces of information that may be
16 included. They're identified separately. At no point is one identified as an
17 example of the other. It's simply saying that you may have different portions
18 of this information. But if you look at the claims, the claims refer to an
19 originating object. So in each of the claims at issue here, it doesn't recite the
20 GenesisActor or a piece of information, it cites the originating object piece
21 of information. And I think if you --

22 JUDGE WORMMEESTER: Counsel, and I think if you go back
23 further, would the GenesisActor be the originating object?

24 MR. BLYTHE: Okay. Yeah, so that's a great question too. So
25 there are scenarios under which the value of the GenesisActor would be the
26 same as the value of the originating object. And to go back to the examples

1 we talked about a minute ago, if you lose your car keys on the way outside
2 the dealership, then the originating object and the GenesisActor are the
3 same. It's, you know, I got the keys from the dealer. So it can be the same
4 value, but it's still two different pieces of information. And the fact that
5 the -- you only have one step in that hypothetical, right, so you go from the
6 first object to the originating object, but there's only one step, so that
7 originating object value is also the GenesisActor. Having both pieces of
8 information tells you that there is only one step, right?

9 So, and I'm not, let me know if that's not clear, because I think
10 that's important. The GenesisActor being only one step, let me start that
11 over. So the originating -- knowing that you're getting the originating
12 object, right, tells you that you're getting the, whatever created the first
13 object, right? So if you also then know that the GenesisActor is that same
14 object that tells you there's only one step, but that's why there are two
15 different pieces of information, because if the GenesisActor was 10
16 generations removed, and you only had the GenesisActor, you wouldn't
17 know how many steps were in between. So --

18 JUDGE WORMMEESTER: But you also, you only had the one
19 that's previous to, you know, the immediately prior object, then you wouldn't
20 have the full audit trail of everything before that, right, the way the claim's
21 written.

22 MR. BLYTHE: Sorry to interrupt.

23 JUDGE WORMMEESTER: So, you know, just with the full audit
24 trail concept, you would want to be able to conclude, or include, sorry,
25 include, you know, the immediately prior object, as well as the GenesisActor
26 and any object in between.

1 MR. BLYTHE: Well, you might want to do that, but that's not
2 what the claims call for. I think what the claims call for is the process by
3 which you would create that audit trail, and the only way you can create the
4 audit trail is if you get the object that created what you're looking at, because
5 if you do that and you repeat that process, you eventually get the full audit
6 trail. If you jump to the GenesisActor, you don't know what comes in
7 between. And it might be desirable to have, in fact, I mean, I think the
8 specifications suggest this, it might be desirable to have both the originating
9 object information and the GenesisActor, but that's not what the claims
10 require. The claims require the originating object. And eventually that may
11 get you to the GenesisActor, but the claims require going that sort of step-
12 by-step, one step at a time back, to what created the current object.

13 I think we may have covered the items you raised, Your Honor, but
14 if not, let me know and I'll --

15 JUDGE WORMMEESTER: No, I think I understand your
16 position. Thank you.

17 MR. BLYTHE: Okay. All right. Thank you, Your Honor.

18 So with that, we will move to Patent Owner's next argument,
19 which relates specifically to the system claims for Ground 1. And again, it's
20 odd that Petitioner chose not to really address this in its argument today, but
21 I think this is important. And so we'll talk about why the sensor agent
22 limitation that's in Claims 8 and 16 is not met.

23 So as noted previously, our preliminary response focused only on
24 Claim 1, but because these are two different claims that relate to the system,
25 I think they're worth addressing specifically. There is no dispute that the
26 claims, which all refer to a sensor agent, require a single device that must

1 meet the challenged claims. And as claimed in the '045 Patent, this single
2 device for the sensor agent must be operable to gather one or more events,
3 generate a contextual state, and obtain a global perspective for claim 8, or
4 assemble an event line that includes global perspective information and
5 that's for Claim 16.

6 The leading slide 14, the Petitioner relies on local agent software
7 on Morris's remote computer 2 as the sensor agent, but there are two
8 overreaching flaws with the Petition that relates to the sensor agent. First,
9 the Petition does not explain how this local agent software on remote
10 computer 2 is operable to perform the limitations required of the sensor
11 agent. And instead sort of the Petitioner cross-references Claim 1, which
12 just doesn't explain what's going on. Second, in those cross-reference
13 portions, the Petition then relies on multiple different devices in connection
14 with the limitations that must be met by the sensor agent. So at times the
15 Petition will rely on Morris's remote computer, but other times the Petition
16 will rely on the base computer or some combination of the remote computer
17 and the base computer. I think it's objectively clear to see that the Petitioner
18 took some shortcuts here in preparing the Petition, but the Petitioner has to
19 live with those, it's not for the parties or the Board now to step in and try to
20 figure out what the Petitioner might have meant. The Petitioner is held to
21 whatever shortcuts it took in the Petition.

22 So looking at each of these in a little more detail. On slide 15,
23 yeah, starting on slide 15, we'll address first the requirement that the sensor
24 agent gather an event. This is in Claims 8 and 16. The Petitioner relies on
25 the remote computer 2 as the sensor agent again and then cross-references to
26 Claim 1. As shown in slide 15, the connection with the gathering an event

1 limitation, in connection with the gathering an event limitation, the
2 Petitioner states that Morris discloses that the base computer gathers events
3 as shown here in this excerpt. Now, admittedly, after this excerpt in the
4 Petition, the Petitioner goes on to refer to what the remote computer does in
5 connection with the gathering an event. But it's not clear for Claims 8 or 16
6 whether Petitioner is relying on the base computer, the remote computer, or
7 some combination of the two, because the Petitioner never makes that clear.
8 It simply cross-references the method claim without identifying what
9 specifically it's relying on in the remote computer or the base computer for
10 the sensor agent. And so that ambiguity counts against the Petitioner, not
11 the Patent Owner.

12 JUDGE MOORE: Well, counsel this is Judge Moore.

13 JUDGE WORMMEESTER: Oh, sorry, go ahead. Sorry.

14 JUDGE MOORE: Don't they specifically say on, I think it was
15 page 32 that you first showed us, that it's the local agent that they're pointing
16 to, to that limitation?

17 MR. BLYTHE: So the Petitioner does say that for the sensor,
18 they're relying on the remote computer with local agent software. The
19 problem is when they get to -- so that's in connection -- so if you look at
20 slide 13, and we look at the claim language, so for Claim 8, where it refers to
21 a sensor agent stored on the data storage that is executable by the processor.
22 Here they sort of commit to the remote computer and the local agent
23 software as being the sensor agent. The ambiguity and difficulty comes
24 when you get to what the sensor agent has to do. They don't stick with it.
25 They don't stick with the remote computer. They either fail to identify
26 anything that's carrying out the required function, or they point to other

1 things that maybe you're carrying out the required function instead of the
2 remote computer.

3 JUDGE MOORE: But in Morris, isn't it the case that the local
4 sensors gather the information and then they send it to the base computer?
5 So basically they both gather the information, the local sensor originally, and
6 then the base computer from the remote sensor?

7 MR. BLYTHE: It may be possible that both gather information.
8 It's just not clear from the Petition which one of those things or which one of
9 those aspects of gathering the Petitioner's relying on because in the Petition,
10 as shown in slide 15, and page 12 of the Petition, it says Morris discloses
11 that the base computer gathers events. So it's simply ambiguous. And I
12 think that should be held against the Petitioner not for (INDISCERNIBLE)
13 to figure out.

14 JUDGE WORMMEESTER: Counsel, I think for, I mean, the way
15 I read Petitioner's argument here is for Claim 1, as Patent Owner pointed out
16 in the briefing, it's a method claim that doesn't, you know, specify what is
17 performing the acts, right? And so Petitioner is trying to meet it with the
18 base computer as well as the remote computer. Okay. And then with
19 Claims 8 and 16, Petitioner is specifying, okay, now we're going to hone in
20 on the remote computer, go back to our argument on Claim 1, and there we
21 are talking about the remote computer. So I'm able to draw that connection
22 that Petitioner is talking about the remote computer, and that Petitioner has
23 shown how the remote computer has gathered this information. So what's
24 the confusing part, I guess? Why -- why as it relates to Claim 8 and 16, do
25 you think the Petitioner is relying on the base computer 3 and we should be
26 counting that against the Petitioner?

1 MR. BLYTHE: Well, as it relates specifically to gathering an
2 event, and again there are two other requirements that we'll get to and talk
3 about sort of have different aspects to it. We're gathering an event, it's
4 because on page 12 of the Petition, the Petitioner says that Morris discloses
5 that the base computer gathers events. I think that creates ambiguity in
6 terms of what they're relying on for that limitation. But even if you could
7 find, Your Honor, that somehow there's a string that could be drawn through
8 all the cross references to show that the sensor agent on the remote computer
9 gathers the event, that still leaves the remaining two limitations that we'll
10 need to talk about that are not met. The second one being generating a
11 contextual state so the sensor agent must be operable to generate a
12 contextual state for at least one of the one or more events by correlating the
13 one or more event to an originating object.

14 But the Petition's discussion of Claim 1 generating a contextual
15 state does not identify any specific device that performs those steps. So for
16 the gathering requirement, it's, in my view, sort of ambiguous. It refers to
17 both the base computer and the remote computer. For the generating a
18 contextual state requirement, the Petition doesn't refer to any particular
19 device in this section, neither the base computer nor the remote computer. It
20 simply talks about the GenesisActor without saying what it is that generates
21 the GenesisActor, or what correlates the GenesisActor to one or more
22 events. And this failure to identify a specific device again is fatal to these
23 claims.

24 As shown in slide 17, the Petition identifies the GenesisActor as
25 the originating object. But the Petition does not identify which device of
26 Morris is operable to generate the GenesisActor, or to correlate it to an

1 event. So, perhaps, implicitly recognizing that it failed to address how a
2 specific device generates the GenesisActor or correlates it to a particular
3 event, the Petitioner raises a new argument in its reply, which is not
4 permitted, of course, for the reasons that we stated. And in this new
5 argument, the Petitioner no longer relies on the GenesisActor as the
6 originating object. Now the Petitioner argues that, quote, “events initiated
7 by or involving the object when the object is created, configured, or runs,”
8 as referenced in paragraph 87 of Morris, is the contextual state information.
9 But prior to the reply, the Petition never relied on that portion of Morris for
10 the originating object. In its reply Petitioner notably does not mention the
11 GenesisActor at all in connection with a sensor agent being operable to
12 generate a contextual state information. The Petitioner's abandonment of the
13 GenesisActor as the originating object is an implicit admission that the
14 Petition was deficient on these claims.

15 Now, turning to the third requirement, the sensor agent also must
16 obtain a global perspective or assemble an event line that includes global
17 perspective information. So for Claim 8, the Petitioner, again, just cross-
18 references Claim 1 for the global perspective. And then for Claim 16, the
19 Petitioner also cross-references Claim 1, but also attempts to explain how
20 the event line that's required is assembled, and that's on page 36 of the
21 Petition. The Petitioner describes the event line as the key referenced in
22 Morris. The Petitioner then describes the key as being sent to the base
23 computer for analysis, but the key at that stage, even according to Petitioner,
24 includes all the information required by the event line except for the global
25 perspective information. So when the event line's assembled by the remote
26 computer, it doesn't have the global perspective information that's required.

1 The Petitioner acknowledges, again, on page 36 of the Petition, that it is only
2 at the base computer that the global perspective information is obtained. So,
3 for example, as shown on slide 18.

4 JUDGE MOORE: Counsel, can I stop you there? This is Judge
5 Moore. That event line limitation says with at least one event that
6 identifying each of -- I don't see where the global perspective is in the event
7 line limitation.

8 MR. BLYTHE: Okay. So the claim language that I read is for
9 Claim 16, assemble an event line, including details associated with the at
10 least one event, the details including information uniquely identifying each
11 of the first object, the action of the first object, the target, the originating
12 object, and global perspective information.

13 JUDGE MOORE: Okay. So I was looking at Claim 8. I got you.
14 I'm with you.

15 MR. BLYTHE: Okay. It is different. So Claim 8 and Claim 16
16 are a little different in terms of what has to be in the event line. Claim 16
17 does require the global perspective information to be in the event line. But
18 the global perspective information is not obtained by the sensor agent on the
19 remote computer. It is obtained by the base computer for Claim 8. And for
20 Claim 16, the sensor agent on the remote computer does not assemble an
21 event line with global perspective information. The global perspective
22 information is obtained by the base computer. So when the remote computer
23 of Morris assembles the key to send to the base computer by Petitioner's
24 own admission, page 36 of the Petition, it does not have the global
25 perspective information. Thus, the Petitioner fails to prove that the remote
26 computer of Morris assembles an event line or key that includes global

1 perspective information. Now, in its reply --

2 JUDGE WORMMEESTER: Counsel -- sorry to interrupt you. I
3 wanted to ask you a quick question. The determining, which are --
4 determination as to whether the originating object is malware. Is that what
5 you're talking about-- that the global information, that's happening at the
6 base?

7 MR. BLYTHE: That does happen at the base. So, in --

8 JUDGE WORMMEESTER: Is that what you're saying?

9 MR. BLYTHE: Yes, Your Honor. Although --

10 JUDGE WORMMEESTER: Okay.

11 MR. BLYTHE: -- in this Petition, which is a little different, I
12 think, than the '224 Petition, the Petitioner relied on a couple of different
13 potential things as being global perspective information, determining an IP
14 address --

15 JUDGE WORMMEESTER: Right.

16 MR. BLYTHE: Determining whether the object is malware or
17 determining the popularity. But on page 36 of the Petition, they made clear
18 that all of those things are happening at the base computer. So who knows
19 which one is the server?

20 JUDGE WORMMEESTER: Isn't the IP address, which Petitioner
21 pointed out on page 20 of its Petition, isn't that happening at the remote
22 computer?

23 MR. BLYTHE: Not according to the Petitioner, Your Honor.
24 Again, I would read from page 36 of the Petition. Page 36 of Petition says
25 that "Morris discloses assembling a key, i.e., an event line comprising
26 information identifying the first object, action of the first object, target, and

1 originating object and transmitting this key to a base computer for analysis.
2 This analysis,” which is at the base computer, “includes determining an IP
3 address associated with the first/originating object, determining if the first
4 object and/or originating object is malware, and determining a popularity
5 associated with these objects, i.e., global perspective information,” et cetera.
6 The Petitioner's argument is that all of that is happening at the base
7 computer. And therefore, the Petitioner has failed to prove that the remote
8 computer in Morris, which is where Petitioner says the sensor agent is
9 located, assembles an event line or a key that includes global perspective
10 information.

11 Now, in its Reply, I'll just say briefly that Petitioner sort of walks
12 away from all of this, and for the first time points to paragraph 18 in Morris
13 to argue that vendor product and version information constitutes a global
14 perspective. That wasn't in the Petition. It's a totally different argument and
15 should be rejected for that reason alone. The argument in the Petition is that
16 the base computer obtains the global perspective and is worthy of that line
17 that includes global perspective information as assembled. Therefore,
18 Claims 8 and 16, their dependent claims are not unpatentable based on
19 Morris.

20 JUDGE WORMMEESTER: Yeah, I'm looking at paragraph 105
21 of Morris. I think this is what Petitioner is referring to, the IP address. In
22 that table the object 1 sends data to the IP address 3?

23 MR. BLYTHE: I'm not sure, Your Honor. I do note that on page
24 36 of the Petition, they do say that they're relying on the base computer for
25 identifying the IP address. I'm not sure how they get around on that.

26 JUDGE WORMMEESTER: Well, if you look, let's see, you're on

1 36?

2 MR. BLYTHE: That's correct.

3 JUDGE WORMMEESTER: I think the global -- but the global
4 perspective is explained in the discussion of Claim 1, right? I think
5 Petitioner --

6 MR. BLYTHE: Well it's actually described here on page 36.

7 JUDGE WORMMEESTER: Okay. I see what you're saying.

8 MR. BLYTHE: Yeah, again, it says, I think the critical part for the
9 discussion we're having now is that this analysis, which refers to the
10 sentence before the base computer for analysis, includes determining an IP
11 address associated with the first originating object. And they conclude that
12 sentence with, i.e., the global perspective information. I mean, the Petitioner
13 is bound to that argument, Your Honor. They are arguing that it's the base
14 computer where everything they contend is global perspective information is
15 obtained. And of course, you know, neither the Petitioner now nor the
16 Board can re-write their argument to come up with something different.
17 They might have said this is what they relied on and they're held to it under
18 well standing Federal Circuit case law.

19 So if there are no more questions about the sensor agent, I'll turn
20 briefly, very briefly, I think, to the end recipient device. This is a dependent
21 claim, Claim 10, under Morris, in which again, this is one where it's become
22 apparent that a claim construction I think would be helpful. Claim 10
23 requires a sensor agent, a global perspective information server, and an end
24 recipient device. And at the heart of this issue is whether the end recipient
25 device can be the same device as the global perspective information server.
26 So starting with the claim language itself, Claim 10 states that the sensor

1 agent transmits the event line to the end recipient device. So the sensor
2 agent can't be the same as the end recipient device or the event line cannot
3 be transmitted. And the claim identifies both a global perspective
4 information server and an end recipient device, and there would be no reason
5 to identify these as separate devices if they could be the same device. And
6 in fact, if you look throughout the context of the specification as shown in
7 slide 21, you'll see that the specification consistently refers to the global
8 perspective information server and the end recipient device as different
9 separate devices. This is depicted in Figure 2. The global perspective
10 information server here in slide 21 is outlined in orange and the end recipient
11 device 220 is outlined in purple.

12 You'll also see in Figure 4, as shown in slide 22, which addresses
13 the global perspective information server and the end recipient device,
14 interestingly, in conjunction with each other in the same figure and next to
15 each other in the specification, but at no point, either in the figure or in the
16 description of the specification does it suggest that these two items, the
17 global perspective information server or end recipient device, could be the
18 same device. You see these solid lines around each in Figure 4 indicating
19 that they are separate devices. Also, as shown in slide 23, the specification
20 associates the end recipient device with certain functions.

21 These include a user or administrator interacting with the end
22 recipient device to view data or use an audit trail to track back an event to
23 what triggered it. The specification includes no indication that that sort of
24 activity at the end user device or end recipient device occurs at the global
25 perspective information server.

26 The Petitioner argues that the base computer 3 is both the global

1 perspective information server, and the end recipient device. And really the
2 Petitioner basically just assumes that the base computer is an end recipient
3 device and includes no analysis or consideration of how the '045 Patent
4 treats those two devices separately.

5 JUDGE WORMMEESTER: I mean, the claim just requires that
6 something be sent to it, right?

7 MR. BLYTHE: Well, Claim 10 is a little more -- so claims 1, 8,
8 and 16 just refer to transmitting. I believe it is the event line. But Claim 10
9 is a little more specific in saying that where it's transmitted. So you identify
10 in Claim 10, unlike the other claims, where it's transmitted. The event line is
11 transmitted to the end recipient device.

12 JUDGE WORMMEESTER: So I think Petitioner isn't, I mean,
13 Petitioner is saying that the global perspective information server isn't just
14 the base computer, but it's that in combination with the database.

15 MR. BLYTHE: I think that's right. Yeah. But the database is
16 located on or part of the base computer is my reading and I may be wrong,
17 but I believe Petitioner's reading of what's disclosed there.

18 JUDGE WORMMEESTER: Right. So I -- why can't the base
19 computer in combination with the database and then the base computer,
20 regardless of the database, be relied on for two different things?

21 MR. BLYTHE: Because the specification consistently describes
22 them as being separate devices. I mean, as you see in Figure 4 and in Figure
23 2, where you have a global perspective information server and an end
24 recipient device, these are separate. Two different items. At no point in the
25 specification does it suggest that one single computer would serve both
26 functions. There are functions attributed just to the end recipient device,

1 again, where you have an administrator or someone who's doing an audit
2 trail analysis. That's at the end recipient device. They're simply disclosed
3 consistently in the specification as two separate devices. And there's no
4 analysis in the Petition to suggest why they would be treated as the same.
5 It's simply (INDISCERNIBLE).

6 JUDGE WORMMEESTER: Is there anything in the specification
7 that says they can't be the same or share the same components?

8 MR. BLYTHE: There's nothing that addresses that particular
9 question other than the entire context shows that they're separate devices.
10 So there's no suggestion that they could be the same. They're presented
11 consistently as different devices with different functions.

12 JUDGE WORMMEESTER: Okay. Thanks.

13 MR. BLYTHE: All right. I'll turn briefly now to event priority.
14 This applies to Grounds 1 and 2, Petitioner will have a --

15 JUDGE WORMMEESTER: Okay. Just before we move on, I just
16 wanted to let you know you have about 15 minutes left.

17 MR. BLYTHE: Okay. Thank you, Your Honor. So for Grounds
18 1 and 2, Petitioner relies on Van Oorschot in combination with either Morris
19 or Capalik for this event priority limitation. Claim 3 requires that the event
20 priority is based on one or more of the generated context and the global
21 perspective for the at least one event. The Petitioner does not rely on the
22 global perspective alternative there. They rely on the generated context and
23 the generated context because Claim 3 is dependent from Claim 1, refers
24 back to the generated context in Claim 1, which relates to an originating
25 object.

26 So specifically, the generated context that must be associated here

1 with the event priority must include an indication of the originating object of
2 the first object and must include an indication of at least one of a device on
3 which the first object is executed and a user associated with the first object.
4 So there are a couple of specifically separate requirements that have to be
5 addressed. I think what happened in the Petition is they only addressed one
6 of those. They only addressed sort of the later requirements of picking
7 either a device or a user associated with the first object and just forgot or did
8 not address connecting the event priority with the originating object. So
9 the -- in fact, the Petition does not allege in any way in the Petition that Van
10 Oorschot's severity level is based on an originating object.

11 After the Patent Owner in its Response identified this originating
12 object gap in the Petition's event priority argument, Petitioner attempted to
13 address the originating object for the first time in its reply brief, and there
14 the Petitioner argued that Van Oorschot's Who disclosure or attribute can be
15 a user or software tool, and that this user or software tool is an originating
16 object. Again, you won't find that in the Petition anywhere. Regardless,
17 this argument is wrong for multiple reasons.

18 So first, in addition to being untimely, Van Oorschot does not state
19 that it's Who can be a software tool. There's no disclosure of a software tool
20 being part of a Who disclosure in Van Oorschot. Also, the Petitioner's
21 argument that a user can be an originating object is unsupported. There's no
22 discussion anywhere in the '045 Patent or in Van Oorschot of an originating
23 object being a human being, a user, a person-- that's simply constructed for
24 the first time in the reply brief.

25 And finally, the Petitioner conflates what is the first object in an
26 event with an originating object. So on page 18 of its reply, the Petitioner

1 states that as an example, when a user or software tool creates a file, then the
2 user or software tool is an originating object of the event created and the first
3 object file, but that's simply incorrect. An event is an action of a first object
4 acting on a target. That is described in Claim 1 as shown on slide 30. And
5 that context must be a basis for the event priority in Claim 3. And the
6 Petitioner's argument that user or software tool acts on a target by creating a
7 file and this is the first object, not the originating object. Thus, the
8 Petitioner's argument for unpatentability of Claim 3 should be rejected, and
9 that claim should be upheld as patentable.

10 Finally, I'll just note pretty briefly here in connection with Capalik,
11 this is Ground 2, that we talked earlier about what is the right claim language
12 for Capalik. I think what happened here is that in the Petitioner's Reply,
13 they essentially relied on the claim language from the '224 Patent or some
14 version of that, instead of the claim language that is in the '045 Patent. As
15 addressed on page 6, I believe it is of the Petition, the parties have agreed in
16 this proceeding to adopt the construction of essentially what has become the
17 construction of the District Court as to what the correct claim language is.
18 That is the construction that Judge Wormmeester noted earlier today that
19 relates to a global perspective that is for one or more other events related to
20 the event across the network, and the other related to language simply isn't
21 applicable here. In the institution decision, the Board concluded the
22 Petitioner failed to show how the across the network limitation is met in
23 Capalik.

24 And we think that the Petitioner's new arguments here are not
25 sufficient, are both new and incorrect. Everything in Capalik is based on a
26 single decoy network device that operates independently. And in fact, even

1 if you were to have more than one decoy network device, which is alluded to
2 in Capalik, there's no discussion, no indication of Capalik that these decoy
3 network devices are communicating with each other across the network.
4 There's simply no disclosure that in Capalik. It's not in the Petition, and it's
5 not in Capalik. In fact, Capalik suggests that these decoy network devices
6 treat everything that comes into them as being potentially malicious. That's
7 the way they're set up. So there's no suggestion that you're having sort of
8 communicating, tracking an event across multiple decoy network devices
9 over a network. That's just not supported by the disclosure in Capalik.

10 And if there are no questions on Capalik, I'll reserve the remainder
11 of my time for sur-rebuttal.

12 JUDGE WORMMEESTER: I don't have any other questions. We
13 stopped at 51 minutes, so you'll have nine more minutes in sur-rebuttal.

14 MR. BLYTHE: Thank you, Your Honor.

15 JUDGE WORMMEESTER: All right. Mr. Miotke, you're up
16 when you're ready.

17 MR. MIOTKE: Thank you, Your Honor. Just one point of
18 cleanup. Just coming back more to your question earlier regarding the
19 discussion concerning Van Oorschot and the transmission of the event line
20 and combining it with Morris. Just wanted to step back and note that this is
21 specifically addressed at pages 28 to 29 of the Petition. And then that cites
22 to paragraphs 133 to 140 of Dr. Lee's declaration. And then more
23 specifically, it is addressed, I believe, at paragraphs 132 and 133 of Dr. Lee's
24 declaration. So I just wanted to make sure I stepped back and was complete
25 in that response. So with that, nothing further to add unless there are further
26 questions.

1 JUDGE WORMMEESTER: I don't have any right now. Thanks.

2 MR. MIOTKE: Thank you.

3 JUDGE WORMMEESTER: Great. All right, Mr. Blythe, you
4 have nine minutes.

5 MR. BLYTHE: Thank you, Your Honor. I was trying to look
6 quickly at the portions of Dr. Lee's declaration in the Petition that counsel
7 just cited. I wasn't able to look at all of them just now. I do believe, though,
8 that those excerpts that were cited do not address the argument that was in
9 the reply about originating objects in connection with the Van Oorschot,
10 including specifically treating it as a software tool were part of the
11 originating object. I don't think you'll find that addressed there, and
12 otherwise I have no other comments unless there are questions.

13 JUDGE WORMMEESTER: All right. I don't think we have any
14 questions so that will conclude our hearing. Thank you to both parties for
15 your time. The case is submitted and the hearing is adjourned.

16 (Whereupon, the above-entitled matter went off the record at 2:44
17 p.m.)

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