

1 UNITED STATES PATENT AND TRADEMARK OFFICE  
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

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3 CAPTION HEALTH, INC., )  
4 Petitioner, )  
5 v. ) IPR2025-01422  
6 UNIVERSITY OF BRITISH )  
7 COLUMBIA, ) Patent No. 10,751,029  
8 Patent Owner. )

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9 DEPOSITION OF RAHUL C. DEO, MD, PH.D  
10 SECOND SESSION

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11 11:51 a.m.  
12 April 17, 2026

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20 FOCUS LITIGATION  
21 File #26160

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24 UBC-2052  
25 Caption Health v. University of British Columbia  
Reported By: Judy Robinson, CCR #2171 IPR2025-01422

A P P E A R A N C E S

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I N D E X

WITNESS	EXAMINATION	PAGES
DR. RAHUL C. DEO, MD, PH.D.	MR. MARANDO.....	4-21 27-28
	MR. MANSKE.....	21-27

E X H I B I T S

(No exhibits were marked.)

1 BE IT REMEMBERED that the second session of the  
2 deposition upon oral examination of DR. RAHUL C. DEO,  
3 MD, PH.D., was taken on April 17, 2026, at 11:51 a.m.,  
4 at 125 South 309th Street, Federal Way, Washington,  
5 98003, before Judith A. Robinson, CCR, Notary Public in  
6 and for the State of Washington, residing at Federal  
7 Way, Washington.

8 Whereupon, the following proceedings were had,  
9 to-wit:

10 VIDEOGRAPHER: The time is 11:51 a.m.

11 We are back on the record.

12 E X A M I N A T I O N

13 BY MR. MARANDO:

14 Q. All right. Could you turn to paragraph 277,  
15 please?

16 A. Yes, I'm there.

17 Q. All right. So in paragraph 277, you state  
18 that it's your opinion that Krishnan discloses a set of  
19 classifiers specifically giving examples of neural  
20 networks implemented and trained to accomplish featured  
21 distraction, quality assessment, and view  
22 identification. Do you see that?

23 A. I see that, yes.

24 Q. So if the Board disagrees with your opinion  
25 that Krishnan discloses neural networks for feature

1 extraction, then you don't have an opinion that claim 14  
2 is unpatentable; right?

3 MR. MANSKE: Objection to form.

4 REPORTER: I'm sorry. Is what? Un what?

5 MR. MARANDO: Unpatentable.

6 REPORTER: Patentable, thank you.

7 A. It's still rendered obvious by Chen and Wu.

8 REPORTER: I'm sorry, Chen and Wu. Okay, Chen  
9 and Wu. Thank you.

10 BY MR. MARANDO:

11 Q. That is not an opinion in your Declaration;  
12 right?

13 A. It says, "Is rendered obvious by Krishnan,  
14 Chen, Wu." Nowhere in my Declaration do I say that if  
15 102 is not deemed a classifier my argument no longer  
16 stands. That is not a -- that is not said anywhere  
17 here.

18 Q. So you're saying that you would instead rely  
19 on Chen and Wu?

20 A. Yes.

21 Q. You haven't done that though in your  
22 Declaration; right?

23 MR. MANSKE: Objection to form.

24 A. I don't understand what that means.

25 BY MR. MARANDO:

1 Q. Well, in your Declaration you site Krishnan --  
2 MR. MANSKE: Objection to form.

3 BY MR. MARANDO:

4 Q. -- for a set of classifiers; right?

5 A. Krishnan, Chen, and Wu are all listed here.  
6 As -- so I don't know what you're saying as to whether  
7 or not -- and Chen and Wu were already introduced as  
8 representing images -- an image taking network. So I  
9 feel like they're already sufficiently introduced for  
10 them to serve this purpose.

11 Q. Do you cite any disclosures of Chen and Wu for  
12 claim 14?

13 A. There's a -- as I had explained above but it  
14 is not -- we stated here regarding Chen and Wu directly  
15 disclosing this. It's again, referring back earlier.

16 Q. Right. So for claim 14, you do not site any  
17 disclosures for Chen and Wu?

18 A. They're --

19 Q. Explicitly?

20 A. They're not repeated here explicitly, I agree,  
21 yes.

22 Q. Can you look at paragraph 279, please?

23 A. Yes.

24 Q. And your opinion is that Krishnan teaches that  
25 a feature extracting neural network is configured to

1 take training images as input and output extracted  
2 feature representations as claimed; right?

3 A. Yes.

4 Q. And which component of Krishnan are you  
5 referring to?

6 A. 102.

7 Q. Okay. Modules 103, 104, and 105 take  
8 extracted features as implements; right?

9 A. That's correct, yeah.

10 Q. Can you move forward to paragraph 281, please?

11 A. (Complies).

12 Q. So what's the first feature -- withdraw that.  
13 What is the feature-extracting neural network you're  
14 relying on for claim 15?

15 A. Krishnan has the -- is the sort of -- is the  
16 initial disclosed neural network feature attracting  
17 neural network. Chen and Wu represent specific  
18 embodiments or instantiations that would be  
19 understandable to a procedure.

20 REPORTER: Hold on. It's hard to hear you.  
21 Dr. Deo, can you please speak up a little bit?

22 WITNESS: Sure.

23 REPORTER: And you just said extensions.  
24 Was that the word?

25 WITNESS: Instantiations.

1                   REPORTER:   Instantiation.

2   BY MR. MARANDO:

3           Q.    In paragraphs 281 through 283 which are your  
4 complete analysis of claim 15; right?

5           A.    Yes.

6           Q.    In those paragraphs you do not explicitly cite  
7 Chen and Wu; correct?

8           A.    I see Chen and Wu cited several times.

9           Q.    Well, I don't.  So let's talk about that.

10          A.    We're talking about 281 through 283?

11          Q.    Yes.

12          A.    So when you say "cite," do you mean passages  
13 from Chen and Wu that are excerpted?

14          Q.    Citations to the Chen and Wu exhibits in their  
15 disclosures.  Do you do that in these paragraphs?

16          A.    I think that the -- I have referred to  
17 Krishnan, Chen, and Wu and have already referred to what  
18 content within them is relevant.  But no, there are no  
19 direct excerpts or disclosures from them included in  
20 these paragraphs.

21                   REPORTER:  In these what?

22                   WITNESS:  Paragraphs.

23                   REPORTER:  Paragraphs.

24   BY MR. MARANDO:

25          Q.    And when you refer to Chen and Wu, you're

1 referring to the combination of Krishnan, Chen, and Wu;  
2 right?

3 A. That's correct, yes.

4 Q. So you don't explicitly separate Chen and Wu  
5 and talk about their disclosures in paragraphs 281  
6 through 283; right?

7 A. That's correct, yes.

8 Q. Can you turn to paragraph 288, please?

9 A. Yes.

10 Q. So this is your analysis of claim 16; right?

11 A. Yes.

12 Q. The complete analysis is paragraphs 284  
13 through 290. But I'm going to ask you about paragraph  
14 288.

15 A. Uh-huh.

16 Q. So here you state that Chen discloses a method  
17 for training the feature extracting J-CNN using training  
18 images. Do you see that?

19 A. Yes.

20 Q. So here you're relying on Chen's feature  
21 extracting J-CNN as the claimed feature extracting  
22 neural network; is that right?

23 A. In this particular paragraph, in this overall  
24 claim 16, there's reference both to Krishnan and to Chen  
25 serving this role. So looking at 287, again, Krishnan

1 discloses that its classification methods may be  
2 implemented by a trained neural networks including the  
3 feature extracted neural network.

4 And then Chen discloses a particular neural  
5 network structure that extracts special feature  
6 representations. So both of them are being used here.

7 Q. So are you combining Krishnan and Chen's  
8 feature extraction, or are you relying on one of them,  
9 or what's your combination here?

10 A. So in the event that Krishnan is missing  
11 details that the POSITA would need, Chen --

12 REPORTER: Hold on. The POSITA?

13 WITNESS: Would -- yes, would --

14 REPORTER: P-O-S-I-T-A?

15 WITNESS: P-O-S-I-T-A, yeah.

16 REPORTER: Go ahead.

17 A. Chen can supply them.

18 BY MR. MARANDO:

19 Q. So Chen is an alternative?

20 A. It's -- the -- well, the two together render  
21 16 obvious in that the Krishnan provides the broad  
22 workflow and details of the pieces that are required.  
23 Chen provides a specific instantiation of that that can  
24 be used. That's how I read obviousness.

25 Q. So you think -- just trying to understand,

1 you're thinking of obviousness as it could be either  
2 one, Chen or Krishnan. And you're not taking a position  
3 whether it's Krishnan's neural network which you allege  
4 is a neural network or Chen's J-CNN in your combination?

5 A. Krishnan is broad. So Krishnan's neural  
6 network really is sort of -- it would -- it could  
7 include Chen's specific example in it. That would be a  
8 perfectly acceptable version of Krishnan. So I see it  
9 as being Krishnan has already disclosed a feature  
10 extracting neural network as one embodiment of one of  
11 two and the exact details of that could be those that  
12 are provided in Chen.

13 Q. In your Declaration, are you taking a position  
14 on that issue, or are you just saying that it could be  
15 done that way?

16 A. That's how -- I mean, that is how I see that  
17 I've taken a position throughout 12 through 16, is the  
18 idea that the -- that Krishnan already discloses the  
19 workflow and the building blocks, and that Chen and Wu  
20 provide the sort of detailed examples of what could be  
21 used. That's throughout has been my -- has been the  
22 approach to this ground D claims.

23 REPORTER: Hold on. Has been the what --

24 WITNESS: Approach --

25 REPORTER: Approach. Approach. Okay.

1 WITNESS: -- to these ground D claims.

2 REPORTER: Okay. Approach. Thank you. And  
3 can you just speak up a little bit, Doctor, please?

4 WITNESS: Sure.

5 REPORTER: Thank you.

6 BY MR. MARANDO:

7 Q. So in your combination of Krishnan, Chen, and  
8 Wu for claim 16 is Chen's neural J-CNN optional or is it  
9 included in your combination?

10 A. When you say "optional," what do you mean?

11 Q. Well, I'm asking what your opinion is; right?

12 A. Yeah.

13 Q. So I'm trying to understand if you're taking  
14 the position that JCNN is what you're relying on and it  
15 is in your combination of Krishnan and Chen, and I'm a  
16 little unclear on that. So do you have a position on  
17 that?

18 A. I -- so my view of obviousness is -- has been  
19 that the details provided in Chen for training would  
20 help a POSITA in implementing Krishnan. So it's a  
21 supplier of additional details. I haven't seen this as  
22 being a mandatory slop of one thing versus the other.  
23 This is to make the obviousness claim to the POSITA.

24 Q. So it's your argument in the Declaration that  
25 you would apply the teachings regarding Chen's JCNN to

1 what you allege to be Krishnan's neural network  
2 classifiers; is that right?

3 A. That's right, yep.

4 Q. So you are not relying on Chen's feature  
5 extracting JCNN as the claimed feature extracting neural  
6 network; is that right?

7 A. That's correct, yeah.

8 Q. Chen's JCNN takes raw ultrasound image frames  
9 as input; right?

10 A. Correct.

11 Q. In Krishnan, the images have already been  
12 processed by module 102 to extract features before they  
13 reach classifiers 103, 104, and 105; right?

14 A. The equivalent to Chen's JCNN is 102.

15 Q. Yeah, that's a different question. I'm asking  
16 with -- well, are modules 103 and 104 and 105 part of  
17 your combination Krishnan and Chen for claim 16?

18 A. Chen is a possible embodiment of Krishnan's  
19 views -- feature extraction and view identification  
20 functions. I didn't interpret this as being that  
21 somebody would create a Frankenstein to be able to  
22 implement to demonstrate obviousness. That one isn't  
23 the -- that isn't the point of these combinations.

24 The combination is to say that Krishnan has  
25 already disclosed this but there may be details that are

1 missing around specifics and those details could be  
2 provided by Chen in this case or Wu in this case. So  
3 that someone who would look -- would see 029 as being  
4 obvious because they would first have seen Krishnan and  
5 then any modern implementation details that are missing  
6 would be supplied by Chen or Wu.

7 Q. So for claim 16 you would apply Chen's  
8 teachings to Krishnan's which you allege to be  
9 classifiers; is that -- that's correct?

10 A. That's correct. Yes.

11 Q. So Krishnan's modules 103, 104, and 105, those  
12 are designed and, in fact, do take extracted features as  
13 inputs; right?

14 A. That's correct. Yeah. As does Chen's  
15 view-classifying module too. It takes extracted  
16 features as inputs.

17 Q. Is that the JCNN?

18 A. No. That's the -- the JCNN is the feature  
19 extractor but JCNN and LSDN are the feature extracting  
20 layer of Chen. They take images of inputs. The view  
21 classification functionality would be the upper layers  
22 of this TRNN network.

23 REPORTER: Hold on. Of this TNN what?

24 WITNESS: Sorry, we're getting into  
25 the -- TRNN network.

1           REPORTER: Network, okay.

2 BY MR. MARANDO:

3           Q. So just to be clear, in your combination,  
4 Chen's JCNN is not actually in the combination it is  
5 used to apply its teachings to Krishnan; is that right?

6           A. Yeah, this is a training claim. So the  
7 details of training a neural network are supplied -- the  
8 exclusive details of training a neural network are  
9 supplied by Chen. Krishnan's very broadly defined  
10 potentially neural network classifier feature extraction  
11 module would be -- can be interpreted in light of these  
12 trainings. That's -- the training of that module would  
13 be done in a similar way to the training that is  
14 described in Chen.

15          Q. What module is Krishnan's neural network  
16 feature extraction module?

17          A. 102.

18          Q. Can you move to paragraph 299, please?

19          A. Yes.

20          Q. So this is for claim 19 and it's your opinion  
21 that it would have been obvious to a POSITA to implement  
22 Krishnan's feature extraction using the neural network  
23 structure in training methods disclosed in Chen; is that  
24 right?

25          A. That's correct, yeah.

1 Q. And then, in paragraph 301, it's your opinion  
2 that Chen discloses as claimed inputting the first  
3 feature representations into a second feature extracting  
4 neural network to generate respective second feature  
5 representations each associated with one of the  
6 ultrasound images; correct?

7 A. That's correct, yeah.

8 Q. So are you relying on Chen's LSTM as the  
9 second feature extracting neural network for this claim?

10 A. Yes.

11 Q. In your proposed combination of Krishnan and  
12 Chen, what is the input to the LSTM?

13 A. Extracted features coming from the JCNN.

14 REPORTER: Can't -- oh, wait. Can't hear you.

15 WITNESS: Okay. Extracted features coming  
16 from the JCNN.

17 BY MR. MARANDO:

18 Q. Well, the JCNN is not actually part of your  
19 combination; right?

20 A. No, it is.

21 Q. So we were just talking about claim 16; right?

22 A. Yes, before this.

23 Q. And I believe you said that the JCNN is not  
24 actually part of the combination. You're applying its  
25 teachings but still using Krishnan's module 102; is that

1 right?

2 A. I think we're getting confused here. The 102  
3 is just a sort of a slot wherein you could place a  
4 neural network architecture. You can place the neural  
5 network architecture of Chen. You can place other  
6 neural network architectures there. Chen represents one  
7 specific example that you could use. The purpose of  
8 obviousness here is just to show this isn't one example  
9 you could use. If you have you two networks, in feature  
10 extracting networks and series, then you would -- that's  
11 one example is being supplied by Chen, which is the JCNN  
12 combined with the LSTM.

13 REPORTER: Hold on. Which is the JCNN what?  
14 Being what?

15 WITNESS: Combined with the LSTM.

16 REPORTER: Thank you.

17 BY MR. MARANDO:

18 Q. Well, I agree we're getting confused. So what  
19 I'm trying to understand is what the combination is.  
20 And so if the combination is applying the JCNN teachings  
21 to Krishnan for claim 16, which I thought you said, I  
22 don't understand how you can analyze claim 19 and say  
23 that now we're inputting -- you know, we're getting  
24 inputs to the LSTM from a JCNN of Chen, which isn't  
25 actually part of the combination for claim 16. Do you

1 understand what I'm saying?

2 A. Yeah, but I'm sort of confused by your framing  
3 here as to what is -- what exactly does it mean to swap  
4 something in? Is -- these are just examples of how one  
5 could have a feature extracting neural network that is  
6 trained or a feature extracting neural network that is  
7 trained that is feeding a second feature extracting  
8 network. Chen is providing details on -- explicit  
9 details on how you could do that. And so this is an  
10 example.

11 So I'm not -- I think the idea of swapping in  
12 and out seems to me not the point of obviousness, as  
13 much as it is that you have this scaffold that is very  
14 general that can accommodate a wide variety of  
15 architectures. And in each one of these claims, you  
16 need an architecture. The -- Chen and Wu are providing  
17 additional details on how one could train in the setting  
18 of that architecture.

19 Q. So you're not actually in your combinations  
20 proposing to add Chen? You're kind of collectively  
21 thinking of the teachings?

22 A. Yes. For the point of obviousness, yes.  
23 That's the way I interpreted 12 through -- now we're up  
24 to 19 or 20. It was never an idea that you're swapping  
25 modules in and out as much as in light of Krishnan not

1 supplying some of the explicit details one might need.  
2 One can find those details in Chen and Wu.

3 Q. Well, did you consider what modifications  
4 would need to be made to Krishnan when you're applying  
5 the teachings of Chen to Krishnan's classifiers?

6 A. Yeah, that's where these little to no  
7 statements arose from, is that there really would not be  
8 a need for any substantive modifications.

9 Q. All right. So on claim 19, the input to the  
10 LSTM in your proposed combination of Krishnan and Chen  
11 is the output of Chen's JCNN; is that right?

12 A. That's correct, yeah.

13 Q. Is Krishnan's module 102 a part of the  
14 combination?

15 A. We're applying Chen's teachings of feature  
16 extraction 1 and 2 to Krishnan's module 102.

17 Q. So Krishnan's module 102 is still part of the  
18 combination; right?

19 A. Krishnan's module 102, to understand the  
20 teachings of Chen, the feature extraction module would  
21 be a CNN with an RNN. That's the specific teaching that  
22 would be offered by Chen in this case.

23 Q. Right. Can you turn to paragraphs 303 through  
24 305, please?

25 A. Uh-huh. Yeah.

1 Q. So this is for claim 20, and as I understand  
2 it, you're relying on the same Chen LSTM for claim 20 as  
3 you are for claim 19; is that correct?

4 A. Yeah. 20 gets specific that it needs to be a  
5 recurrent neural network. 19 does not require that. So  
6 it's the same architecture and teachings. However  
7 it -- but otherwise there's nothing new that we've added  
8 to 20.

9 Q. It's the same LSTM?

10 A. Yep.

11 Q. Which is -- which you believe discloses claim  
12 20?

13 A. Yeah.

14 Q. All right.

15 REPORTER: And what's the acronym? LSTM or N?

16 WITNESS: M as in Mary.

17 REPORTER: Okay, thanks.

18 MR. MARANDO: All right. Let's take a break  
19 and let's go off record.

20 VIDEOGRAPHER: The time is 12:21 p.m., we're  
21 off the record.

22 (Off the record.)

23 VIDEOGRAPHER: The time is 12:32 p.m., we are  
24 back on the record.

25 BY MR. MARANDO:

1 Q. All right. So during any of the breaks today,  
2 did you speak with anyone about the substance of your  
3 testimony?

4 A. I did not.

5 MR. MARANDO: I don't have any further  
6 questions. Thank you for your time. I pass the  
7 witness.

8 MR. MANSKE: Thank you, Counsel.

9 E X A M I N A T I O N

10 BY MR. MANSKE:

11 Q. Dr. Deo, I know it's been a long day, so if  
12 you'll just bear with me for a few follow-up questions  
13 from the testimony today. If you could pull up the  
14 Krishnan reference Exhibit 1005, I'd like to go first to  
15 figure 1 which is a workflow we've been discussing at  
16 length today.

17 A. Yes.

18 Q. Are you there?

19 A. I'm sorry. Give me a second.

20 Okay. Here I am. Yeah.

21 Q. What does figure 1 depict?

22 A. Figure 1 depicts the workflow specified by  
23 Krishnan or disclosed by Krishnan, where there is an  
24 input image fed into a data processing series of  
25 modules, which conduct some combination of feature

1 analysis, view identification quality assessment.

2 REPORTER: Hold on. What identification  
3 qualities?

4 WITNESS: View identification.

5 REPORTER: View, V-I-E-W?

6 WITNESS: V-I-E-W identification.

7 REPORTER: Thank you. Apologies. Go ahead.

8 A. Quality assessment which is supported by an  
9 image database of labeled examples and a learning engine  
10 with the classifier models.

11 BY MR. MANSKE:

12 Q. Thank you. And during the course of the day,  
13 there's been a lot of questioning and a lot of testimony  
14 with respect to items in figure 1 denoted by additional  
15 numbers 102, 103, 105, for instance. Do you recall  
16 that?

17 A. I do, yes.

18 Q. And in the context of figure 1, in these  
19 modules, there's been additional discussion about  
20 combinations of references, whether it's Krishnan  
21 itself, Exhibit 1005, or other references, including the  
22 Chen reference. Do you recall that?

23 A. I do.

24 Q. And there was questioning and testimony  
25 regarding, and these are terminology used by both you

1 and counsel regarding replacing or removing or swapping  
2 different modules, whether that be 102, 103, 104, or 105  
3 with respect to figure 1. Do you recall that?

4 A. I do, yes.

5 Q. And within figure 1, Krishnan's workflow, and  
6 in those combinations, I'd like to understand what you  
7 mean by the terms replacing, remaining and swapping  
8 modules with respect to the purported combinations of  
9 references that you've identified in your Declaration?

10 A. So my understanding of obviousness is that  
11 there are -- that Krishnan already discloses the  
12 critical features -- critical functions that are present  
13 in 0029, specifically feature analysis, view  
14 identification, quality assessment, with images feeding  
15 this as well as training. But what might be missing to  
16 a POSITA is some specifics on how that could be done.  
17 And so the word swap was never my intention as much as  
18 it was to say that one specific way one could have a  
19 feature extracting module could be using either a single  
20 convolutional neural net in isolation.

21 REPORTER: Hold on. Convolutional what?

22 WITNESS: Neural net.

23 REPORTER: Neural net what? Go ahead.

24 WITNESS: In isolation.

25 REPORTER: Thank you.

1           A.     Or in sequence with a second feature  
2 extraction RNN and could supply extracted features to  
3 either a quality assessment or view identification  
4 network, either those could either be parallel or taken  
5 one at time. And so Chen, Wu and Assay are really there  
6 to provide some of these more modern implementations of  
7 how that could be done, but still working off of the  
8 same scaffold of functions that have already been  
9 disclosed by Krishnan.

10 BY MR. MANSKE:

11           Q.     You used a terminology that I will admit I  
12 have not heard before, instantiation. Do you recall  
13 that?

14           A.     Yes.

15           Q.     First, what does that mean? Just as a pure  
16 definitional exercise, and then how did you intend that  
17 when you were talking about the references in your  
18 proposed combinations?

19           MR. MARANDO: Objection to form.

20           A.     I'm sorry. I use instantiation similar to how  
21 embodiment is used in the sense that this is a specific  
22 example of a type of architecture that could be used to  
23 perform a function. It's really sort of swapping a  
24 generic function description with a specific  
25 instantiation or specific embodiment. That's the way I

1 was using it.

2 BY MR. MANSKE:

3 Q. There was also extensive questioning and  
4 testimony about terminology segmentation and filtering.  
5 Do you recall that?

6 A. I do. Yes.

7 Q. What does -- let's break those apart. What is  
8 segmentation in the context of the field of machine  
9 learning?

10 A. Segmentation is locating within an image a  
11 certain structure of relevance. Typically performed by  
12 a classifier of models that assign at the level of every  
13 pixel whether it belongs in or out of that specific  
14 structure.

15 Q. What is filtering in the context of the field  
16 of machine learning?

17 MR. MARANDO: Objection to form.

18 A. Filtering is somewhat of a not well-defined  
19 term. But one could -- there are certain neural  
20 networks or -- there are certain type of filters that  
21 are applied to images to highlight specific elements  
22 within them, whether they are edges, circles, forms,  
23 blobs. There -- so applying -- usually this is applying  
24 some matrix to the pixel intensity values to highlight  
25 the presence of some feature.

1 BY MR. MANSKE:

2 Q. Would the meaning of segmentation and  
3 filtering that you just relayed be the meaning that one  
4 at skill in the art would understand for those terms in  
5 2005?

6 MR. MARANDO: Objection, form.

7 A. Yes, I believe so.

8 BY MR. MANSKE:

9 Q. And would the meaning of those terms as you  
10 just relayed be the same as one at skill in the art  
11 would understand as of 2018?

12 MR. MARANDO: Objection to form.

13 A. Yes.

14 BY MR. MANSKE:

15 Q. Earlier today there was questioning and  
16 testimony regarding the term "extracted features" in a  
17 couple of different contexts. Do you recall that?

18 A. I do, yes.

19 Q. And you testified at one point that extracted  
20 features could be images. Do you recall that?

21 A. I did, yes.

22 REPORTER: Could be what?

23 WITNESS: Images.

24 REPORTER: Oh, images.

25 BY MR. MANSKE:

1 Q. What did you mean by that?

2 A. I meant that one role of a feature extraction  
3 network, somewhat similar to segmentation, is defining  
4 what area in that image is relevant to then be fed into  
5 some downstream application. That could involve simply  
6 just cropping out a -- the result of that would be an  
7 identification of a mask, lots of zeros and ones where  
8 the relevant feature of interest is boxed off. You  
9 could apply that mask to the output and then now you'll  
10 have an image to be able to feed into downstream  
11 applications.

12 MR. MANSKE: Thank you, Dr. Deo. I have no  
13 further questions for the witness at the time. I'll  
14 pass the witness, Mr. Mirando.

15 E X A M I N A T I O N

16 BY MR. MARANDO:

17 Q. In your last answer, you were just discussing  
18 whether extracted features could be images; is that  
19 right?

20 A. That's correct. Yes.

21 Q. And in your response, I think you said that it  
22 could be cropped images but you did not say that an  
23 extracted feature could be raw image -- original image  
24 data; is that correct?

25 A. You could have the cropping result in the

1 original image. But no, I -- my intention was that a  
2 POSITA would understand that some transformation would  
3 have happened relative to the original, typically  
4 delineating some -- it would still represent an image in  
5 the sense that it would meet the -- sort of the same  
6 characteristics of when we described an image, but it  
7 would unlikely be the same image that was fed into it in  
8 the first place.

9 REPORTER: That was fed into the what?

10 WITNESS: Fed into it in the first place.

11 MR. MARANDO: Okay. I don't have any further  
12 questions.

13 MR. MANSKE: Nothing from me.

14 REPORTER: Okay. And, Mr. Marando, would you  
15 like to order an -- a rough draft, sir?

16 MR. MARANDO: Yes.

17 REPORTER: And do you want -- do you need this  
18 ASAP or do you need it in ten business days or somewhere  
19 in-between?

20 MR. MARANDO: I need it in a rush.

21 REPORTER: Okay.

22 MR. MARANDO: What's the fastest time? I  
23 don't know, three days? Whatever.

24 REPORTER: Today -- okay. So do you want me  
25 to just send it over Monday?

1 MR. MARANDO: Yes, please.

2 REPORTER: You got it. And same for you,  
3 Mr. Manske?

4 MR. MANSKE: Yes. And I probably should have  
5 got this on the record, but we'll read and sign and  
6 we'll do that quickly. And Chris, I might grant you a  
7 little bit of relief heading into the weekend. We'll  
8 agree to the requested extension. I'll follow up in an  
9 e-mail.

10 MR. MARANDO: Okay. Thank you. I appreciate  
11 it.

12 MR. MANSKE: Yeah. I'm not trying to jam you  
13 up. I just didn't get to it yesterday.

14 MR. MARANDO: I figured I would send it  
15 yesterday so that we could talk about it today, but I  
16 appreciate it.

17 We'll proceed with -- should we go off the  
18 record?

19 REPORTER: Yes.

20 MR. MANSKE: That's fine.

21 MR. MARANDO: Let's go off the record.

22 VIDEOGRAPHER: The time is 12:44 p.m., we're  
23 off the record.

24 (The second session of the deposition of  
25 Dr. Rahul C. Deo, MD, Ph.D., was concluded at

1 12:44 p.m.)

2 (Signature was reserved.)

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1 STATE OF WASHINGTON )  
2 ) SS.  
3 COUNTY OF KING )  
4

5 I, the undersigned, declare under penalty of  
6 perjury that I have read the foregoing transcript, and  
7 that the foregoing is a true and correct transcript of  
8 my testimony contained  
9 therein.

10  
11 EXECUTED this \_\_\_\_\_ day of \_\_\_\_\_ 2026 at  
12 \_\_\_\_\_, \_\_\_\_\_.

13  
14  
15 \_\_\_\_\_  
16  
17 RAHUL C. DEO, M.D., PH.D.

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April 20, 2026

Rahul C. Deo, M.D., Ph.D.  
c/o William E. Manske, Esq.  
william.manske@thompsonhine.com

Re: Caption Health, Inc. v. University of British Columbia  
Date of Deposition: April 17, 2026

The transcript of your deposition taken in the above-entitled matter has been transcribed. The original transcript will be held for 35 days from the date of this letter before it is sealed and forwarded to the noticing attorney.

You have the right to review, sign and make corrections to your transcript within the 35-day period. Please call the above number, or e-mail to make an appointment for your review. It is our policy not to release the original transcript and complimentary copies are not provided.

If you are represented by an attorney, we advise that you contact your attorney to discuss this matter. If you are an independent witness and have questions, please contact the attorney who requested you to testify or this office for further instructions.

If you wish to waive signature, please sign and date below and return this letter to the above address. In the event you have not read, corrected, and signed your deposition within (30) days of receipt of this letter, it may be used with the full force and effect as though it had been read, corrected, and signed.

Cc: All counsel

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Rahul C. Deo, M.D., Ph.D.

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<b>level</b> (1)	<b>move</b> (2)	<b>PATENT</b> (5)	<b>raw</b> (2)
<b>License</b> (1)	< <b>N</b> >	<b>Patentable</b> (1)	<b>reach</b> (1)
<b>light</b> (2)	<b>need</b> (8)	<b>penalty</b> (1)	<b>read</b> (3)
<b>listed</b> (1)	<b>needs</b> (1)	<b>perfectly</b> (1)	<b>really</b> (4)
<b>LITIGATION</b> (1)	<b>neither</b> (1)	<b>perform</b> (1)	<b>recall</b> (7)
<b>little</b> (5)	<b>net</b> (3)	<b>performed</b> (1)	<b>record</b> (9)
<b>LLP</b> (2)	<b>network</b> (33)	<b>perjury</b> (1)	<b>recurrent</b> (1)
<b>locating</b> (1)	<b>networks</b> (6)	<b>PERKINS</b> (1)	<b>refer</b> (1)
<b>long</b> (1)	<b>neural</b> (34)	<b>Petitioner</b> (2)	<b>reference</b> (3)
<b>longer</b> (1)	<b>never</b> (2)	<b>PH.D</b> (5)	<b>references</b> (4)
<b>look</b> (2)	<b>new</b> (1)	<b>pieces</b> (1)	<b>referred</b> (2)
<b>looking</b> (1)	<b>Nicollet</b> (1)	<b>pixel</b> (2)	<b>referring</b> (3)
<b>lot</b> (2)	<b>Notary</b> (3)	<b>place</b> (5)	<b>regarding</b> (5)
<b>lots</b> (1)	<b>November</b> (1)	<b>please</b> (9)	<b>regardless</b> (5)
<b>LSDN</b> (1)	<b>numbers</b> (1)	<b>point</b> (4)	<b>relative</b> (2)
<b>LSTM</b> (9)	<b>NW</b> (1)	<b>POSITA</b> (7)	<b>relayed</b> (2)
< <b>M</b> >	< <b>O</b> >	<b>P-O-S-I-T-A</b> (2)	<b>relevance</b> (1)
<b>M.D</b> (1)	<b>Objection</b> (7)	<b>position</b> (5)	<b>relevant</b> (3)
<b>machine</b> (2)	<b>obvious</b> (5)	<b>possible</b> (1)	<b>relief</b> (1)
<b>mandatory</b> (1)	<b>obviousness</b> (9)	<b>potentially</b> (1)	<b>rely</b> (1)
<b>MANSKE</b> (19)	<b>offered</b> (1)	<b>presence</b> (1)	<b>relying</b> (7)
<b>MANSKE.....21-</b>	<b>OFFICE</b> (1)	<b>Present</b> (2)	<b>remaining</b> (1)
<b>27</b> (1)	<b>officer</b> (1)	<b>probably</b> (1)	<b>REMEMBERED</b> (1)
<b>MARANDO</b> (31)	<b>official</b> (1)	<b>procedure</b> (1)	<b>removing</b> (1)
<b>marked</b> (1)	<b>oh</b> (2)	<b>proceed</b> (1)	<b>render</b> (1)
<b>Mary</b> (1)	<b>Okay</b> (13)	<b>proceedings</b> (1)	<b>rendered</b> (2)
<b>mask</b> (2)	<b>ones</b> (1)	<b>processed</b> (1)	<b>repeated</b> (1)
<b>matrix</b> (1)	<b>opinion</b> (8)	<b>processing</b> (1)	<b>replacing</b> (2)
<b>MD</b> (4)	<b>optional</b> (2)	<b>proposed</b> (3)	<b>Reported</b> (1)
<b>mean</b> (7)	<b>oral</b> (1)	<b>proposing</b> (1)	<b>REPORTER</b> (38)
<b>meaning</b> (3)	<b>order</b> (1)	<b>provide</b> (2)	<b>represent</b> (2)
	<b>original</b> (3)	<b>provided</b> (3)	<b>representations</b> (4)
		<b>provides</b> (2)	<b>representing</b> (1)

represents (1)	somewhat (2)	thanks (1)	versus (1)
requested (1)	sorry (5)	thing (1)	Videographer (5)
require (1)	sort (7)	think (5)	view (9)
required (1)	Soufou (1)	thinking (2)	V-I-E-W (2)
reserved (1)	South (1)	THOMPSON (1)	view-classifying (1)
residing (2)	speak (3)	thought (1)	views (1)
respect (3)	special (1)	three (1)	< W >
respective (1)	specific (12)	time (8)	wait (1)
response (1)	specifically (2)	times (1)	want (2)
result (2)	specifics (2)	TNN (1)	Washington (8)
right (34)	specified (1)	today (6)	Way (7)
RNN (2)	SS (2)	to-wit (1)	weekend (1)
Robinson (4)	stands (1)	TRADEMARK (1)	Well (9)
role (2)	State (7)	train (1)	well-defined (1)
rough (1)	stated (1)	trained (4)	We're (10)
rush (1)	statements (1)	training (11)	we've (2)
< S >	STATES (1)	trainings (1)	WHEREOF (1)
saying (4)	Street (2)	transcribed (1)	wide (1)
says (1)	structure (4)	transcript (4)	WILLIAM (1)
scaffold (2)	substance (1)	transformation (1)	William.Manske@ThompsonHine.com (1)
seal (1)	substantive (1)	TRIAL (1)	withdraw (1)
Seattle (1)	sufficiently (1)	TRNN (2)	WITNESS (23)
SECOND (9)	Suite (1)	true (2)	word (2)
see (7)	supplied (4)	trying (4)	workflow (5)
seen (2)	supplier (1)	turn (3)	working (1)
segmentation (5)	supply (2)	two (3)	Wu (26)
send (2)	supplying (1)	type (2)	< Y >
sense (2)	supported (1)	Typically (2)	yeah (17)
separate (1)	Sure (2)	< U >	yep (2)
sequence (1)	Sutie (1)	Uh-huh (2)	yesterday (2)
series (2)	swap (2)	ultrasound (2)	< Z >
serve (1)	swapping (5)	Un (1)	zeros (1)
servicing (1)	< T >	unclear (1)	
SESSION (3)	take (5)	undersigned (1)	
set (3)	taken (3)	understand (12)	
setting (1)	takes (2)	understandable (1)	
show (1)	talk (3)	understanding (1)	
sign (1)	talking (3)	UNITED (1)	
Signature (1)	teaches (1)	UNIVERSITY (1)	
similar (3)	teaching (1)	unpatentable (2)	
simply (1)	teachings (10)	upper (1)	
single (1)	ten (1)	use (3)	
sir (1)	term (2)	usually (1)	
site (2)	terminology (3)	< V >	
skill (2)	terms (3)	values (1)	
slop (1)	testified (1)	variety (1)	
slot (1)	testimony (7)	version (1)	
somebody (1)	thank (12)		