

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MINNESOTA

TSTEIGEN, INC. d/b/a
TEC-SPIRAL; HONGJIA WANG

Plaintiffs

Case Number:

vs.

0:21-CV-02759 (JWB-JFD)

VIKING DRILL & TOOL, INC.
a/k/a CONSOLIDATED TOLEDO DRILL

Defendants

Volume I of the video-taped deposition
of HONGJIA WANG was held on Monday, April 3, 2023,
commencing at 9:00 A.M., at the Cambria Rockville, 1
Helen Heneghan Way, Rockville, Maryland 20850 before
Louisa B. McIntire-Brooks, Notary Public.

Also present: Curtis Roginski, Official Videographer
REPORTED BY: Louisa B. McIntire-Brooks

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HAIYAN HUTCHISON,

The Mandarin interpreter, having been duly sworn, swore to translate the English language into the Mandarin language, and the Mandarin language into the English language to the best of her ability.

PROCEEDINGS

Whereupon

MR. ROGINSKI: Good morning. We are going on the record at 9:16 a.m. on April 3rd, 2023. This is media unit one of the video recorded deposition of Hongjia Wang, the corporate representative of Tsteigen, taken in the matter of Tsteigen, Inc. d/b/a Tec-Spiral; Hongjia Wang v. Viking Drill & Tool, Inc. a/k/a Consolidated Toledo Drill filed in the United States District Court for the District of Minnesota. Case number 0:21-CV-02759 (JWB-JFD). My name is Curtis Roginski representing Veritext and I'm the videographer. The court reporter is Louisa Brooks also with Veritext.

Will counsel please identify yourselves and state whom you represent.

1 MR. VANDENBURGH: For the defendant, Viking
2 Tool, Derek Vandenburg, and Katherine Chen of the
3 Carlson Caspers law firm.

4 MR. CUNNINGHAM: For the plaintiffs, Kelly
5 Cunningham, of Ervin Cohen & Jessup, Beverly Hills, and
6 I'm also here on behalf of the witness, representing
7 the witness as well.

8 MR. ROGINSKI: Thank you. Will the court
9 reporter please swear in the witness.

10 Whereupon,

11 HONGJIA WANG,
12 called as a witness, having been first duly sworn to
13 tell the truth, the whole truth, and nothing but the
14 truth, was examined and testified as follows:

15 EXAMINATION BY MR. VANDENBURGH:

16 Q. Could you state your full name for the
17 record.

18 A. Hongjia Wang.

19 Q. Do you also go by the name John Wang?

20 A. Yes.

21 Q. Do you have a residence in the United

1 States?

2 A. Yes.

3 Q. What is that address?

4 A. 412 Long Trail Terrace, Rockville,
5 Maryland.

6 Q. Do you also have a residence in China?

7 A. Yes.

8 Q. What is that address?

9 A. I will speak in Chinese.

10 MS. HUTCHISON: Interpreter need to verify
11 with the number first.

12 A. Okay. It's Shanghai City. The spelling is
13 S-H-A-N-G-H-A-I, Xuhui, spelling is X-U-H-U-I, Zhongcao
14 Road, the spelling is Z-H-O-N-G-C-A-O, 111, Building
15 two, suite number 1903.

16 Q. How long have you had your residence in
17 Rockville, Maryland?

18 A. More than seven years.

19 Q. How much of your time do you spend in the
20 United States?

21 A. Do you mean this year?

1 Q. On average over the last seven years?

2 A. In the recent three years because of
3 pandemic, mostly I stay in the U.S., and before that,
4 maybe more than half of the time I stay there.

5 Q. Are you getting ready to travel back to
6 China shortly?

7 A. Yes.

8 Q. How long do you anticipate you will be in
9 China?

10 A. Maybe three months and a half.

11 Q. Do you have residences anywhere else?

12 A. No.

13 Q. Have you had your deposition taken before?

14 A. No.

15 Q. You understand that you are under oath
16 today as if you were in a court of law?

17 A. Yes.

18 (Deposition Exhibit 1 was marked for
19 purposes of identification.)

20 Q. I'll hand you what I previously marked as
21 Exhibit 1. Have you seen this document before?

1 A. Yes.

2 Q. Do you understand that you are designated
3 by Tsteigen to testify on the topics in Exhibit 1?

4 A. Yes.

5 Q. Did you do anything to prepare to testify
6 on the topics of Exhibit 1?

7 MR. CUNNINGHAM: Objection, broad, vague.

8 MR. VANDENBURGH: Just for clarity, are you
9 going to translate objection when he objects?

10 MS. HUTCHISON: Interpreter interpret
11 everything.

12 A. Yes. I had gone over it a little.

13 Q. Did you speak with anybody in preparation
14 to testify on the topics of Exhibit 1 other than
15 Mr. Cunningham?

16 A. Yes.

17 Q. Who did you speak with?

18 A. My wife, Jenny.

19 Q. That's Jenny Zhou?

20 A. Yes.

21 Q. She also works at Tsteigen?

1 A. Yes.

2 Q. What did you speak with her about relative
3 to Exhibit 1?

4 A. I just told her I was nervous.

5 Q. Did you ask her for any information
6 relating to the topics?

7 A. No.

8 Q. Did you review any documents to help you
9 prepare to testify regarding the topics of Exhibit 1?

10 A. Yes. I looked through some.

11 Q. What documents did you look through?

12 A. Some time log.

13 MR. VANDENBURGH: Sorry, didn't hear that.

14 MS. HUTCHISON: Time log.

15 MR. CUNNINGHAM: I'll also object to the
16 form of the question. It's multiple questions the way
17 it's been asked.

18 Q. Did you meet with Mr. Cunningham in
19 preparation for your deposition?

20 MR. CUNNINGHAM: I'll also object only into
21 the -- help the witness remember not to disclose any

1 communications he made with me in his answer.

2 A. Yes.

3 Q. When did you meet with Mr. Cunningham?

4 A. Yesterday.

5 Q. For how long?

6 A. I didn't look at time.

7 Q. Can you roughly estimate how long?

8 A. A few hours.

9 Q. What e-mail addresses do you use for your
10 working capacity?

11 A. Tspiral@188.com and another one is
12 JWUS2012@gmail .com.

13 Q. Do you use that second e-mail address for
14 Tsteigen's business at all?

15 A. The second one I just mentioned?

16 Q. Yes.

17 A. Yes.

18 Q. Do you know if that e-mail address was
19 searched for documents relevant to this lawsuit?

20 A. It has been searched?

21 Q. Was that a question?

1 A. Yes.

2 Q. Was it searched for this case?

3 MR. VANDENBURGH: Kelly, can you help here?
4 Do you know what e-mails were searched?

5 MR. CUNNINGHAM: I don't know. That's my
6 team.

7 A. I am not aware that it was searched
8 previously.

9 Q. Did your attorneys in this case collect
10 e-mails for the Tspir@188.com address?

11 A. I thought you were the one collecting the
12 content, not my attorney.

13 Q. The way this works, your attorneys collect
14 the e-mails and do searching and then turn over some of
15 the e-mails to us. I'm trying to understand what
16 e-mails were collected to then search. Do you recall
17 somebody on behalf of your attorneys collecting e-mails
18 for the Tspir@188.com address?

19 A. Yes.

20 Q. Do you recall somebody on behalf of your
21 attorneys collecting your e-mails for the

1 JWUS2012@gmail address?

2 A. No.

3 Q. Do you have any other personal e-mail
4 addresses?

5 A. I have, but I didn't use that.

6 Q. You didn't use those for any work purposes?

7 A. Yes.

8 Q. Other than yesterday, did you meet with
9 Mr. Cunningham in preparation for your deposition at
10 any other time including remotely?

11 A. No.

12 Q. What is the business of Tsteigen?

13 A. Imported tools from Asia to North America.

14 Q. Who owns Tsteigen?

15 A. My wife and me.

16 Q. It was formed in 2015?

17 A. Can't remember for sure.

18 Q. What is the relationship between Tsteigen
19 and Tec-Spiral?

20 A. I am one of the owner of Tec-Spiral.

21 Q. Are the products that are imported by

1 Tsteigen all Tec-Spiral products?

2 A. Yeah, almost.

3 Q. What products does Tsteigen import that are
4 not Tec-Spiral products?

5 A. For example, we imported some mount piece
6 from Taiwan, send to Tec-Spiral for further process.

7 MR. VANDENBURGH: What was that word?

8 Q. Unfinished product?

9 A. Unfinished, yes.

10 Q. You are one of the owners of Tec-Spiral?

11 A. Yes.

12 Q. How many other owners are there?

13 A. Two.

14 Q. Who are the other owners?

15 A. Jenny Zhou and Jane Chan.

16 MS. HUTCHISON: J-A-N-E C-H-A-N.

17 THE WITNESS: Yes.

18 Q. If I understood correctly, the other two
19 owners are, one is Jenny Zhou, your wife?

20 A. Yes.

21 Q. And the other is Jenny Chan?

1 A. Jane Chan, not Jenny Chan.

2 Q. Who is Jane Chan?

3 A. Another owner.

4 Q. Is she family?

5 A. No.

6 Q. How do you know her?

7 A. Friend.

8 Q. Does Jane Chan have any role at Tsteigen?

9 A. No.

10 Q. How long has Tec-Spiral been in business?

11 A. I cannot remember.

12 Q. More than ten years?

13 A. I think so.

14 Q. More than 20 years?

15 A. Maybe.

16 Q. What is the business of Tec-Spiral?

17 A. Manufacturing and selling Titan tools and
18 other tools.

19 Q. What role does Jenny Zhou serve at
20 Tsteigen?

21 A. Marketing and sales.

1 Q. Are there other employees of Tsteigen?

2 A. No.

3 Q. How many employees are there at Tec-Spiral?

4 A. Around 130.

5 Q. Are they all at one location?

6 A. Yes.

7 Q. What city is that location in?

8 A. Shanghai.

9 Q. You understand the patents are at issue in
10 this lawsuit; correct?

11 MS. HUTCHISON: I'm sorry. Could you
12 repeat?

13 Q. Do you understand the patents that are at
14 issue in this lawsuit?

15 A. Yes.

16 Q. Does Tsteigen sell products that it
17 believes are covered by those patents?

18 A. Yes.

19 Q. What are those products called?

20 A. The name?

21 Q. How do you -- let me ask both. Yes, what

1 name?

2 A. English name is ...

3 MR. VANDENBURGH: Hyper-Step?

4 A. Hyper-Step and EZ Boost.

5 Q. So do you use both Hyper-Step and EZ Boost
6 as two different terms for the products that Tsteigen
7 sells that are covered by the patents at issue?

8 A. No.

9 Q. Are those two different names for the same
10 product?

11 A. Yes.

12 Q. Do you have a general name that you use for
13 that type of drill, for example, I tend to call it a
14 stepped tip twist drill?

15 MR. CUNNINGHAM: Objection to the form of
16 the question. You may answer. You can answer.

17 A. No. Chinese term?

18 Q. Yes.

19 A. Yes, in Chinese.

20 Q. I'm confused. So do you call it a step
21 tipped twist drill?

1 MR. CUNNINGHAM: Objection to the form of
2 the question. Those are your words.

3 A. In Chinese name is High Efficient Drill.

4 Q. Does Tsteigen sell products other than the
5 Hyper-Step drills?

6 A. Yes.

7 Q. How many other products has it sold?

8 A. Do you mean how many types?

9 Q. Yes.

10 A. I think maybe more than ten.

11 Q. Is it correct that the Hyper-Step drills
12 are currently only sold to Fisher Tools?

13 A. Hyper-Step, yes. But EZ Boost, no.

14 Q. Who is the EZ Boost drill sold to?

15 A. US?

16 Q. Yes.

17 A. Name is Partsmaster.

18 Q. Partsmaster?

19 A. Partsmaster, belong to NCH Group, but now
20 was sold to Lawson.

21 (Deposition Exhibit 2 was marked for

1 purposes of identification.)

2 Q. So I'm showing you what has been marked as
3 Exhibit 2. Can you tell me what this document is?

4 A. That's our U.S. patent.

5 Q. And you are the named inventor of this
6 patent?

7 A. Yes.

8 Q. Are you familiar with what this patent
9 discloses?

10 A. Yes.

11 Q. Did you review this patent in preparation
12 for your deposition today?

13 A. Yes, I reviewed roughly.

14 Q. Do you know what the claims of a patent
15 are?

16 A. Yes.

17 Q. And you understand that the claims are what
18 define what the patent covers?

19 A. Yes.

20 Q. Do you understand the claims of Exhibit 2?

21 A. Yes.

1 Q. You believe you have an understanding of
2 what they cover?

3 A. Yes.

4 Q. Do you have an understanding of what the
5 terms used in the patent mean?

6 A. Yes.

7 (Deposition Exhibit 3 was marked for
8 purposes of identification.)

9 Q. I'm showing you now what has been marked as
10 Exhibit 3. What is this document?

11 A. That's our patents PCT.

12 Q. Is this the first patent application that
13 was filed on your stepped tip twist drill?

14 MR. CUNNINGHAM: Objection, document speaks
15 for itself.

16 A. Yes. The document shows that.

17 Q. My question involved whether this was the
18 first patent application filed on the stepped tip twist
19 drill.

20 A. I'm not sure about this question. Do you
21 mean whether or not it is the first application in

1 China or internationally?

2 Q. My question is whether it was the first
3 anywhere. Let me ask another question first. Am I
4 correct that this PCT application was filed on
5 February 14th, 2016?

6 A. Yes.

7 Q. Was any patent application filed on the
8 stepped tip twist drill prior to February 14th, 2016?

9 A. No.

10 Q. You are the named inventor on Exhibit 3?

11 A. Yes.

12 Q. What in your view was new about the drill
13 shown in Exhibit 3?

14 MR. CUNNINGHAM: Objection, compound,
15 vague, calls for a legal conclusion. He may answer.

16 A. Okay, about his character, the document had
17 shown all. The name thing is there is a little drill
18 tip and with the step drills and how -- it's -- okay,
19 it's in step shape, the cutting edge.

20 Q. Could you reread that answer again as you
21 best understand it?

1 A. Sure. The main character should be there
2 is little sharp bit in the shape of steps, it's a
3 spiral edge.

4 Q. To understand that more, so part of what
5 was new was having a stepped tip where the cutting
6 edges are spiral?

7 MR. CUNNINGHAM: Objection,
8 mischaracterizes the evidence.

9 A. I don't quite understand your description.

10 Q. I'm just trying to understand your prior
11 answer. Could you point to what you were referring to
12 in your prior answer to help me understand what you
13 meant in the pictures on Exhibit 3?

14 A. Can I confirm your question first?

15 Q. Yes.

16 A. So you're asking about the character of my
17 patent?

18 Q. I was asking about your prior answer which
19 did relate to what was new about this patent
20 application in your mind.

21 MR. CUNNINGHAM: Also, I'll object just to

1 the fact that the document speaks for itself to a
2 number of these questions. And I'll just leave that as
3 an open objection for several of these questions.

4 MR. VANDENBURGH: I will give you a
5 standing objection.

6 A. Okay. Part of the new things including a
7 small central drilling tip. And then there is step
8 shape cutting edge. And distributed in spiral shape.

9 Q. We're going to be talking about spiral, I
10 expect a lot the next two days. So I want to
11 understand what you mean by spiral in that answer. Can
12 you illustrate using the figure on the front page of
13 Exhibit 3 what you mean by spiral shaped cutting edge?

14 A. Okay. I can just pick a figure that shows
15 very clearly the spirally step drill. Okay. Let me
16 draw our patent cutting edge.

17 Q. Can you draw a lead line to the edge you
18 just marked in figure seven of Exhibit 3 and label it
19 spiral?

20 MR. CUNNINGHAM: You might want to refer to
21 it as an arrow instead of a lead line.

1 Q. Can you draw an arrow to that red line and
2 just label it spiral edge?

3 A. It's not spiral edge.

4 Q. Okay. Use your own terminology.

5 A. So I can write in Chinese?

6 Q. Yes, and then can we have the translator
7 translate it on the document?

8 MR. CUNNINGHAM: And I will say objection,
9 mischaracterizes the evidence on the question.

10 A. Cutting edge shows distributed spirally.

11 Q. Do you have an objection if we just write
12 on that the translation of it?

13 MR. CUNNINGHAM: I don't mind. No
14 objection.

15 MR. VANDENBURGH: You're the translator so
16 I'm going to let you do it. Can you write the best
17 translation to that?

18 MR. CUNNINGHAM: She provides a second bill
19 for translation services, you'll pay a hundred percent
20 of that.

21 MS. HUTCHISON: I agree.

1 MR. VANDENBURGH: Thank you.

2 Q. Why don't we go off the record and take a
3 break, I understand our box is here.

4 MR. CUNNINGHAM: Okay.

5 MR. ROGINSKI: This marks the end of media
6 unit one, going off record, time is 10:09 a.m.

7 (Deposition Exhibit 4 was marked for
8 purposes of identification.)

9 MR. ROGINSKI: This marks the beginning of
10 media unit number two. Going back on record, the time
11 is 10:19 a.m.

12 Q. Mr. Wang, I'm showing you what I have
13 marked as Exhibit 4. I will tell you that I believe
14 this to be the patent application that was filed on
15 what became the patent of Exhibit 2.

16 A. Okay.

17 Q. And the first page of Exhibit 4 is the
18 inventorship declaration filed with that patent
19 application. And that is your signature on the first
20 page of Exhibit 4; correct?

21 A. I cannot remember.

1 Q. Does it appear to be your signature?

2 A. I'm not quite sure. It's 2019.

3 MR. CUNNINGHAM: I'll also object to
4 Exhibit 4 in that the declaration has been modified by
5 having images on the back of it.

6 MR. VANDENBURGH: To be clear for the
7 record, we made the exhibit two-sided. But this is
8 straight out of the prosecution history that goes
9 straight from the inventorship declaration into the
10 drawings and the remainder of the specification.

11 Q. The disclosure of Exhibit 4 which became
12 the 583 patent is different from that of Exhibit 3;
13 correct?

14 MR. CUNNINGHAM: Objection, vague,
15 ambiguous.

16 A. The description is different in wordings.

17 Q. Were you involved in supplying the new
18 information for Exhibit 4 relative to Exhibit 3?

19 A. Yes.

20 MR. CUNNINGHAM: Objection, vague.

21 Q. Why was the decision made to file Exhibit 4

1 with an updated disclosure relative to Exhibit 3?

2 MR. CUNNINGHAM: Objection, vague.

3 MS. HUTCHISON: Interpreter need to verify.

4 A. It is not new disclosure. Okay. The
5 information was already disclosed on Exhibit 3. It
6 just provided more in details.

7 Q. If you'll turn to page five of Exhibit 4
8 which shows figures 5A, 5B and 5C. Those figures are
9 new compared to Exhibit 3; correct?

10 A. The figures were not shown on Exhibit 3.

11 Q. Can you describe for me what is shown in
12 each of exhibits 5A, B and C and let's start with 5A?

13 MR. CUNNINGHAM: Objection, ambiguous.

14 MR. VANDENBURGH: Agreed.

15 A. It's a figure about the technical detail of
16 one of the step edge.

17 MS. HUTCHISON: Interpreter need to verify.

18 A. Okay, 5A, 5B, 5C, all derive from fig 4I.

19 Q. So figures 5A, B and C are showing in
20 detail the cutting edge shown at I in figure 4A;
21 correct?

1 A. Yes.

2 Q. So going back to figure 5A, what direction
3 are we looking at that cutting edge? Is it from the
4 top or from the side?

5 MR. CUNNINGHAM: I'll also object. The
6 Exhibit 4, page five has not the best photocopy of that
7 application. Some of the Greek letters are hard to
8 read.

9 Q. I want to be as clear as possible and
10 perhaps it makes more sense to use the 583 patent
11 anyway. So why don't we put aside Exhibit 4. If you
12 would open up Exhibit 2, which is the 583 patent, and
13 if you could start by telling me from what direction
14 are we viewing the cutting edge in figure 5A?

15 MR. CUNNINGHAM: Same objection.

16 MS. HUTCHISON: I'm sorry. The interpreter
17 need to verify.

18 A. From the side.

19 Q. What is being called out in figure 5A?

20 A. There are three angles on the figure. So
21 the main issue is about those three angles.

1 Q. And let's take them one at a time and just
2 tell me what each angle is representing.

3 A. Number ZZ.

4 Q. What is ZZ?

5 A. Number ZZ.

6 Q. I can understand that.

7 A. This is a spiral angle. FZ, that's another
8 spiral angle.

9 MS. HUTCHISON: Interpreter need to verify.

10 A. Okay. This figure is more accurate. It
11 becomes the slant angle of the cutting edge. And then
12 there's a delta.

13 MS. HUTCHISON: Interpreter need to verify.

14 A. It's a relief angle.

15 Q. Does the relief angle shown in 5A, is that
16 axial relief?

17 A. No.

18 Q. What type of relief is it?

19 A. It could be a comprehensive one.

20 Q. Is it relief on the cylindrical portion of
21 the step, the conical portion of the step or both?

1 A. Comprehensive.

2 Q. Let's go to figure 5B. First, I understand
3 there are three separate views being shown in figure
4 5B; is that correct?

5 A. Not accurate.

6 Q. Can you describe what is shown in figure
7 5B?

8 MS. HUTCHISON: Interpreter need to verify.

9 A. Okay. The not shaded area is the view from
10 the top. No, it's not the view from the top.

11 Q. Is it a view from the side?

12 A. Yes, from the side. The left top shaded
13 part is the horizon image and then the left lower
14 corner is another horizon image.

15 Q. I don't understand horizon.

16 MR. VANDENBURGH: Cross section.

17 MS. HUTCHISON: Or vertical.

18 MR. CUNNINGHAM: Side.

19 MR. VANDENBURGH: Vertical slice?

20 MS. HUTCHISON: Vertical slice.

21 A. Just to cut in the middle like an area.

1 Q. So staying on --

2 MS. HUTCHISON: Excuse me, could the
3 interpreter consult? Oh, it's the sectional view.

4 Q. Could you illustrate on the right-hand part
5 of figure 5B in what direction each of the other two
6 figures are sectioned? I understand they are a cross
7 section.

8 MR. CUNNINGHAM: Objection. Document
9 speaks for itself.

10 MR. VANDENBURGH: I wish it did. I don't
11 understand these figures.

12 A. Because it's the standard engineering draft
13 -- drawing. I think it can better describe than words.

14 Q. Does either Tsteigen or Tec-Spiral have the
15 engineering drawings that were used to supply the
16 figures for the 583 patent?

17 MR. CUNNINGHAM: Objection. Assumes facts
18 not in evidence.

19 A. Tec-Spiral provides engineering drawing to
20 apply for a patent.

21 Q. So Tec-Spiral sent drawings to your patent

1 counsel for the purpose of preparing this patent
2 application?

3 A. No.

4 Q. Who sent, if anyone, the drawings to your
5 patent counsel to prepare the patent application of
6 Exhibit 4?

7 A. Me.

8 Q. Where did you obtain those drawings from?

9 A. Tec-Spiral helped me.

10 Q. Do you still have those drawings?

11 A. Do you mean on the application or where?

12 Q. Yes, the original engineering drawing that
13 was used for creating Exhibit 4. Do you still have
14 that?

15 A. Yes.

16 MR. VANDENBURGH: I don't think that's been
17 produced, and if we could start a list of things that
18 we'd like to have produced, that's one of them, any
19 drawings that were supplied for the purpose of the
20 patent application.

21 A. Is that a question?

1 Q. Could you describe what's shown in figure
2 5C? What view are we seeing there?

3 A. From the top.

4 Q. Let's step back to figure three. Am I
5 correct that the steps in that figure are intentionally
6 drawn as slanted relative to the axis of the drill?

7 A. So what area is slant comparing to the
8 drilling axis?

9 Q. Let's start with this: Turn to figure
10 seven, if you would please. Do you agree that in that
11 figure, the steps are illustrated as perpendicular to
12 the drill axis?

13 MS. HUTCHISON: I'm sorry, interpreter
14 would like to verify.

15 MR. VANDENBURGH: Perpendicular.

16 MS. HUTCHISON: Section.

17 MR. VANDENBURGH: No, it's 90 degrees.
18 Parallel would be this way, perpendicular would be this
19 way.

20 MS. HUTCHISON: Could you spell your word?
21 English. Okay. That question again please?

1 Q. In figure seven, the steps are shown as
2 perpendicular to the drill axis; correct?

3 A. No.

4 MR. CUNNINGHAM: Objection, vague and
5 confusing.

6 MR. VANDENBURGH: Again, agreed.

7 MR. CUNNINGHAM: Objection, not using the
8 terms in the patent.

9 MR. VANDENBURGH: I don't think that's an
10 objection, and at some point you need to stop your
11 talking objections. You're allowed to object and that
12 is it.

13 MR. CUNNINGHAM: I was actually being
14 helpful.

15 Q. What term do you use for the individual
16 steps in your patent application?

17 A. I'm not sure about your question because on
18 the patent it shows everything.

19 Q. Okay. Do you understand the phrase
20 composite cutting blade group?

21 A. Yes.

1 Q. Do you understand that the composite
2 cutting blade group is made up of a cylindrical surface
3 and a conical surface?

4 A. It's not accurate from the engineering
5 technical point of view.

6 Q. Why is it not accurate?

7 A. Because the edge we're talking about the
8 converged portion of two areas.

9 Q. Let's do this: You indicated you
10 understand claim one of the 583 patent; correct?

11 A. Yes.

12 Q. You will see at line 16, column ten, it
13 calls out a conical first step surface. Do you see
14 that?

15 A. Yes.

16 Q. Does figure seven show a conical first step
17 surface?

18 A. I'm sorry. Could you repeat?

19 Q. Does figure seven show a conical first step
20 surface as were cited in claim one?

21 A. Yes, there's a conical surface on figure

1 seven.

2 Q. Can you take the red pen and draw an arrow
3 pointing to one of the conical surfaces as were cited
4 in claim one of the 583 patent?

5 A. It's too small. I just paint it over.

6 Q. And then claim one next recites a
7 cylindrical second step surface adjacent to the conical
8 first step surface. Does figure seven show an example
9 of that? Do you want to use a different color?

10 A. Yes.

11 Q. So for the record, you have marked in red
12 and green, a conical first step surface and a
13 cylindrical second step surface in figure seven;
14 correct?

15 A. Yes.

16 Q. And do those conical and cylindrical
17 surfaces together make up a composite cutting blade
18 group as recited in the patent?

19 A. Yes.

20 Q. Do you agree that that composite cutting
21 blade group is illustrated as being perpendicular to

1 the axis of the drill in figure seven when viewed from
2 the side?

3 A. It's an engineering drawing. It may or may
4 not. It could or could not be perpendicular.

5 Q. I understand it could be different. But in
6 figure seven, it is shown as perpendicular; correct?

7 MS. HUTCHISON: Interpreter need to verify.

8 A. Oh, naked eye, everybody is different. And
9 there is no ruler with my eyeglasses.

10 THE WITNESS: Gauge.

11 MS. HUTCHISON: Gauge.

12 Q. Do you agree with me though that figure
13 three was drawn so that the composite cutting blade
14 groups are not visually perpendicular from the axis of
15 the drill when viewed from the side?

16 A. I cannot answer this question. Are you
17 talking about this composite cutting blade group is
18 perpendicular to the axis of the drill or not?

19 Q. Yes. In figure three, are the composite
20 cutting blade groups drawn as perpendicular to the axis
21 of the drill when viewed from the side?

1 A. Because every composite cutting blade group
2 includes at least two blades. So, you are talking
3 about being perpendicular to the axis of the drill, are
4 you talking about the edge?

5 Q. No. I'm talking about the surfaces like
6 you highlighted on figure seven.

7 A. Same answer since it is an engineering
8 drawing so it doesn't stipulate if it's perpendicular
9 or not. So it could be either case.

10 Q. I understand it could be either. Do you
11 agree with me that figure seven was drawn to illustrate
12 composite cutting blade groups that are perpendicular
13 to the drill axis whereas figure three was drawn to
14 illustrate composite cutting blade groups that are not
15 perpendicular to the axis of the drill?

16 A. I have to repeat. My eyes don't have gauge
17 and it's too small and it's not so apparent. So I'm
18 not certain.

19 Q. So does figure three disclose cutting blade
20 groups that are sequentially and spirally formed on the
21 cone portion of the drill?

1 A. Same question.

2 MS. HUTCHISON: Sorry, the same answer.

3 Q. So you can't tell looking at figure three
4 whether the cutting blade groups are sequentially and
5 spirally formed on the exterior of the drill?

6 A. It could be a multiple spiral and it could
7 be perpendicular also.

8 Q. I understand what it could be. But which
9 of those is actually shown in figure three?

10 A. Because three doesn't label as
11 perpendicular. So it may not be perpendicular.

12 Q. If it's not perpendicular, does that make
13 it spirally formed?

14 MR. CUNNINGHAM: Objection, vague and
15 ambiguous.

16 A. Yes. This question is vague. If it's not
17 perpendicular, it should be at certain angle.

18 Q. Let's go back to the claim language. In
19 column ten, line 11 refers to a plurality of composite
20 cutting blade groups formed sequentially and spirally
21 on a cone portion exterior. Do you see that?

1 A. Yes. I saw it.

2 Q. Starting with figure seven, are the
3 composite cutting blade groups shown in that figure
4 formed sequentially and spirally on a cone portion
5 exterior?

6 A. Do I need to label that out?

7 Q. Yes or no question. Are the composite
8 cutting blade groups in figure seven spirally formed on
9 the cone portion exterior as claimed?

10 A. There are two cones and your question
11 referred to which one?

12 Q. Can you point to the two cones you're
13 referring to?

14 A. In red, that's the surface of one cone.
15 That's another. That's a cone too.

16 Q. So in the language of the claims, what you
17 first marked is a conical first step surface; correct?

18 A. Let me read. The answer is no. The second
19 cone.

20 Q. So the cone you most recently marked with
21 two lines, is that the cone portion of the drill as

1 recited in claim one?

2 A. Yes.

3 Q. Can you label that cone portion, please?

4 A. I really --

5 Q. I don't want markings on there that aren't
6 labeled what they are.

7 MS. HUTCHISON: I'm sorry. Could you
8 repeat?

9 Q. Well, I want any markings on the drawing to
10 be labeled as to what they are. Thank you. I'm going
11 to move away from this, but I'm going to ask you to
12 translate first again what's shown on those. Is that
13 cone?

14 MS. HUTCHISON: Cone.

15 (Deposition Exhibit 5 was marked for
16 purposes of identification.)

17 Q. I'm showing you what I have had marked as
18 Exhibit 5 entitled Plaintiff Tsteigen's and Hongjia
19 Wang's response to Defendant Viking Drill & Tool,
20 Inc.'s first set of interrogatories, numbers one
21 through 11. Have you seen this document before?

1 A. Yes.

2 Q. Did you provide information that went into
3 this document?

4 A. When?

5 Q. At any time.

6 A. I provide information to who?

7 Q. To your attorney.

8 A. Yes.

9 Q. If I can direct your attention to page 11,
10 please. I'm going to read the first sentence of the
11 first complete paragraph. "One day Mr. Wang suddenly
12 had an inspiration of trying to apply the benefits of
13 the step drill structure to the drill tip design of the
14 twist drill." Is the sentence I read accurate?

15 A. Yes.

16 Q. When did that inspiration occur to you?

17 A. It has been a while. I cannot remember
18 clearly. It could be 2014 or the beginning of 2015.

19 Q. And you would describe it as a sudden
20 inspiration?

21 A. Yes. Also I can say no.

1 Q. Why do you say both yes and no?

2 A. Let me answer why no. I had been trying to
3 design a good drill tip and I hope we can work to cut
4 easily to be localized well.

5 Q. Centered?

6 A. To the centered well. Centered and stand
7 stably. And good relief. Chip. Chip.

8 Q. Expensive?

9 A. Chip. Chip removal.

10 Q. Oh, chip removal. I'm sorry. Yes.

11 A. And I have had this thought for a long
12 time. And I had been trying to find a new way to get
13 it done. So this design has been taking for a while.
14 So it didn't come all of sudden. But I also say, yes,
15 because I thought about separate the current cutting
16 into some easy cuttings. And then all of a sudden I
17 felt my world using the step form. It looks like step
18 drill but totally different.

19 Q. Where were you when you had this sudden
20 inspiration to apply a step drill tip to a twist drill?

21 A. Do you mean I have such a thought happen in

1 which location?

2 Q. Yes.

3 A. Long time ago. Could be in US, could be in
4 China.

5 Q. Who did you first tell about this idea?

6 A. The chief engineer of our Shanghai factory.

7 Q. What did you tell him?

8 A. I just relay what I describe earlier to
9 him.

10 Q. Did you do that in writing or orally?

11 A. Verbally.

12 Q. In person or over the phone?

13 A. Long time. Not sure. Maybe in person.

14 Q. Are there any records associated with this
15 inspiration you had?

16 A. About my thought?

17 Q. Yes.

18 A. No.

19 Q. What was the first record that was created
20 of your idea?

21 A. There -- it was shown on the record of my

1 Shanghai factory.

2 Q. What record?

3 A. It's a record of product development.

4 Q. Has that record been turned over to your
5 attorneys in this case?

6 A. Yes.

7 Q. What roughly is the date of that record?

8 A. Around March 2015.

9 Q. What is the chief engineer's name that you
10 spoke to?

11 A. That person only has a Chinese name.
12 Zhenli Yang, the spelling should be first name,
13 Z-H-E-N-L-I, last name Y-A-N-G.

14 Q. At the time you had this inspiration, you
15 were familiar with step drills; correct?

16 A. Yes.

17 Q. Compared to twist drills, do step drills
18 cut easier because of their multiple steps?

19 MR. CUNNINGHAM: Objection, vague.

20 A. Yes. But that is not my answer because
21 those two kind of drills are for different purpose.

1 They're not comparable.

2 Q. I understand that. But if I tried to drill
3 a hole with a traditional twist drill and a step drill,
4 would the steps cause the step drill to cut easier?

5 MR. CUNNINGHAM: Objection, vague,
6 ambiguous.

7 A. Same question. They are for different
8 purpose. The step drill could be used on thin wall to
9 drill a host of different radius. It cannot be used to
10 drill deep hole. Just a drill can do so.

11 Q. I understand that. But you're not
12 answering my question. Step drills are often used on
13 material that's perhaps a half an inch thick; correct?

14 A. No.

15 Q. Would you be surprised if I found examples
16 of step drills being used on half inch material?

17 A. Are you talking about the thickness of the
18 material half inch?

19 Q. Correct.

20 A. If the step drill can reach half inch or
21 more than half inch, yes, that could be done.

1 Q. And you are aware that step drills have
2 been used to drill holes in half inch thick material?

3 A. I have not seen step drill in that
4 scenario.

5 MR. VANDENBURGH: Can you say that again?

6 A. I have not seen step drill was used in that
7 scenario.

8 Q. High thick of a material have you
9 personally seen a step drill used with? The thickest.

10 A. If talking about the thickest material
11 using step drills, in our product, it can be
12 10-millimeter.

13 Q. If you're cutting 10-millimeter thick
14 pieces of material, will the steps on a step drill
15 cause it to cut more easily than a twist drill?

16 MS. HUTCHISON: Interpreter need to verify.

17 A. The step drill has different steps. And
18 each step is for -- it's for the hole accordingly and
19 the twist drill only has one size. So it could not be
20 compared so simply like that.

21 MR. CUNNINGHAM: I'll add objection,

1 incomplete hypothetical.

2 MR. VANDENBURGH: Let's take a break.

3 MR. ROGINSKI: This marks the end of media
4 unit number two. Going of record, time is 11:35 a.m.

5 (A discussion was held off the record.)

6 MR. ROGINSKI: This marks the beginning of
7 media unit number three, going back on record, the time
8 is 11:48 a.m.

9 (Deposition Exhibit 6 was marked for
10 purposes of identification.)

11 Q. Mr. Wang, showing you what I have had
12 marked as Exhibit 6. Is this another patent
13 application of which you are the named inventor?

14 A. Yes.

15 Q. And this is on a step drill?

16 A. Yes.

17 Q. Step drills were known before your patent
18 application of Exhibit 6; correct?

19 A. Yes.

20 Q. What was new in your mind about the step
21 drill shown in Exhibit 6?

1 A. It has been disclosed on the document. Do
2 I need to read it or something?

3 Q. Some aspects of the drill in Exhibit 6 were
4 known and some were not, in your mind; correct?

5 A. Yes.

6 Q. I'm trying to understand what aspects were
7 new.

8 A. The new thing is about the back of the
9 edge. And the new one has multiple back of the edge.
10 And the well known step drill only has one edge back.
11 But the most important thing in the pattern is the step
12 drill has multiple backs of the edge.

13 Q. Can you explain what you mean by multiple
14 backs of the edge?

15 A. Please look at figure three. Figure three
16 already show two parts. I cannot mark the back of the
17 edge. That is the first back of the edge. Here's the
18 second one. And for the regular kind only has the
19 first one all the way to the end. But we have two.

20 Q. Does figure three show radial relief?

21 MS. HUTCHISON: I'm sorry. Radial relief?

1 A. I do not understand your question.

2 Q. Okay. If you could turn to page three of
3 Exhibit 6, does that contain a description of figure
4 three?

5 A. Yes.

6 Q. Can you read that description for me?

7 A. Figure three is the blown up image of I of
8 figure two. It shows radial back angle alpha J and the
9 drop ...

10 MS. HUTCHISON: Interpreter cannot read.

11 MR. VANDENBURGH: Something J, delta J.

12 Q. So what is the radial back angle shown in
13 figure three?

14 A. Figure three, 51, that is the radial back
15 angle.

16 Q. What is 52 in figure three?

17 A. That is the gap we're talking about.

18 Q. What is the purpose of that gap?

19 A. Most for it to cool down. For space for it
20 to cool down.

21 Q. Do you agree that what's referred to as

1 radial back angle is a type of radial relief?

2 A. Yes.

3 Q. Prior to your patent application of
4 Exhibit 6, it was known to provide radial relief;
5 correct?

6 MR. CUNNINGHAM: Objection, vague.

7 A. Yes.

8 Q. Am I correct that the way radial relief was
9 designed before your patent was different than what's
10 shown in your patent?

11 MS. HUTCHISON: I'm sorry. Could you
12 repeat please?

13 MR. VANDENBURGH: Yes.

14 Q. Is it correct that the way radial relief
15 was provided prior to your application of Exhibit 6 was
16 different than what is shown in figure three?

17 A. I had explained before, the patent
18 documents show on Exhibit 6 is different than the
19 traditional drill because we have two back of the edge.
20 And the traditional one, it only has one back of edge
21 and also can have back angle.

1 Q. So in prior drills, the radial relief was
2 provided with a constant back angle along its flank
3 surface?

4 A. Yes.

5 Q. And then is it correct that figure four of
6 Exhibit 6 shows a form of axial relief?

7 A. Yes.

8 Q. And before your Exhibit 6 axial relief was
9 known; correct?

10 A. Yes.

11 Q. What is it different about the axial relief
12 shown in figure four compared to prior step drills?

13 MR. CUNNINGHAM: Objection, assumes facts
14 not in evidence.

15 A. The same thing. My patent product shows
16 two backs and with the axial back angle and the
17 traditional, the traditional -- the traditional step
18 drill has the --

19 MS. HUTCHISON: I'm sorry. Interpreter
20 need to repeat.

21 MR. VANDENBURGH: Can you have him repeat?

1 A. The traditional kind with the axial have
2 the back angle all the way extended to the back. Our
3 patent product has two parts. That's the difference.

4 Q. Can you mark the two parts of the back
5 angle in figure 4, please?

6 A. This one is two.

7 Q. Looking at figure one of Exhibit 6, does
8 this step drill have composite cutting blade groups?

9 A. No.

10 Q. Why does it not have composite cutting
11 blade groups?

12 MR. CUNNINGHAM: Objection, vague, broad.

13 A. At first we need to clarify what is
14 composite cutting blade group.

15 Q. I'm using the terminology of claim one of
16 the 583 patent.

17 A. Because it's a different product and it
18 cannot be used that way.

19 Q. Is there any other reason why you would say
20 that this design does not have composite cutting blade
21 groups?

1 A. When I'm talking about composite cutting
2 blades group, it should be a group, not a single one.

3 Q. In your 583 patent, each composite cutting
4 blade group is made up of a conical portion and a
5 cylindrical portion; correct?

6 A. That's different. The cutting blades, the
7 cutting blades doesn't have surface. That's the
8 difference.

9 Q. Do you agree with me that the cutting tips
10 in figure six are oriented spirally as shown in figure
11 two? Exhibit 6 is this document.

12 A. I do not understand your question.

13 Q. Did Tec-Spiral sell step drills of the type
14 shown in Exhibit 6?

15 A. Yes.

16 Q. Was this the first step drill design that
17 Tec-Spiral sold?

18 A. No.

19 Q. Did the step drills Tec-Spiral sold prior
20 to this have just a single axial back angle?

21 A. Yes.

1 Q. And the step drills that Tec-Spiral sold
2 prior to this had just a single radial back angle?

3 A. Yes.

4 Q. Does either Tsteigen or Tec-Spiral do any
5 patent clearance prior to introducing a new product?

6 A. I'm sorry. Could you clarify?

7 Q. Does either company look to see if somebody
8 else has a patent that would cover a new product design
9 developed by Tsteigen or Tec-Spiral?

10 A. Yes.

11 Q. Was that done relative to the Hyper-Step
12 drill?

13 A. I cannot understand.

14 Q. Did Tsteigen or Tec-Spiral do any patent
15 searching relative to the design shown in the 583
16 patent?

17 A. Yes.

18 Q. When was that done?

19 A. Before submitting the patent application,
20 we did a search on our own. After submitting the
21 document to the attorney, the attorney has done some

1 research too.

2 Q. Who did the searching that was done on your
3 own?

4 A. Yes. Me.

5 Q. Where did you search for relevant patents?

6 A. Google and marketing.

7 Q. So one of the things you searched was --
8 did you search Google patents?

9 A. Yes.

10 Q. And just to clarify, then did you search
11 elsewhere?

12 A. Yes.

13 Q. What else did you search?

14 A. In the market, by Home Depot, Lowes, Amazon
15 and the Chinese website Baidu, that is B-A-I-D-U.

16 Q. Did you identify any previous designs of
17 twist drills having step tips?

18 A. This question may not be answered
19 accurately, but I can answer with what I saw. Is that
20 okay? While I was searching, I saw something has some
21 step forms tip on the top. But that was different than

1 what we have.

2 Q. Is what you identified, was that given then
3 to your attorney in connection with the patent
4 application that was filed?

5 A. Yes.

6 Q. Do you recall the names of any of the
7 references you identified with stepped tips?

8 A. I cannot remember clearly, but it was not
9 stepped tip. It was just something with the form of
10 step.

11 (End of public portion of testimony.)
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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.