

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLUIDMASTER, INC.,

Petitioner

v.

DANCO, INC.,

Patent Owner

Case IPR2024-00633

Patent 9,139,993 B1

Case IPR2024-00634

Patent 9,103,105 B1

Case IPR2024-00635

Patent 10,934,698 B1

DEPOSITION OF:

MICHAEL JOBIN

DATE:

March 11, 2025

TIME:

9:08 a.m. to 1:32 p.m.

LOCATION:

5660 Strand Court

Naples, Florida 34110

TAKEN BY:

Petitioner

REPORTER:

Karen White, RPR, CRR

APPEARANCES

For the Petitioner:	RANJINI ACHARYA, ESQ.
(Via Speakerphone)	CAROLYN TOTO, ESQ.
	Pillsbury, Winthrop, Shaw,
	Pittman, LLP
	2550 Hanover Street
	Palo Alto, California 94304
	ranjini.acharya@pillsburylaw.com
	carolyn.toto@pillsburylaw.com
For the Patent Owner:	ERIC MAURER, ESQ.
(Via Speakerphone)	THOMAS FINCH, ESQ.
	Perilla, Knox & Hildebrandt, LLP
	Suite 350
	5871 Glenridge Drive
	Atlanta, Georgia 30328
	e.maurer@pkhip.com
	t.finch@pkhip.com

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1 WHEREUPON,

2 MICHAEL JOBIN

3 acknowledged having been duly sworn to tell the truth
4 and testified upon his oath as follows:

5 THE WITNESS: I do.

6 DIRECT EXAMINATION

7 BY MS. ACHARAYA:

8 Q Good morning.

9 A Good morning.

10 Q Please state your full name for the record.

11 A My name is Michael J. Jobin. It's J-o-b-i-n.

12 Q Thank you, Mr. Jobin. My name is Ranjini
13 Acharya. I am counsel for Fluidmaster, the petitioner
14 in these proceedings.

15 Mr. Jobin, you've been deposed before, correct?

16 A Yes.

17 Q How many times have you sat for a deposition?

18 A I'd say about 15 times.

19 Q And for the record, this deposition is in
20 relation to three inter-partes review proceedings at the
21 patent and trademark office. Those proceedings are No.
22 IPR2024-00633, which relates to U.S. Patent
23 No. 9,139,993; proceedings IPR2024-00634, which relates
24 to U.S. Patent No. 9,103,105; and IPR2024-00635, which
25 relates to U.S. Patent No. 10,934,698.

1 And there's a lot of numbers there, so I'll
2 just be referring to these patents as the '993 patent,
3 the '105 patent and the '698 patent, but if you need me
4 to clarify at any time just let me know, okay?

5 A Understood.

6 Q Thank you. Since you're familiar with the
7 process, I'm just going to go over a couple of
8 housekeeping rules. First, a reminder that we have a
9 court reporter here, so please answer all questions
10 verbally and not with a physical movement like a nod or
11 a shrug.

12 Is that okay?

13 A Yes.

14 Q As another reminder, please wait until I've
15 finished my question before responding, and I will do
16 the same when you answer so that we can get a clean
17 transcript, okay?

18 A Sounds good.

19 Q Okay. If you don't understand my questions,
20 please let me know. If you answer a question, I will
21 assume that you understood it.

22 Does that make sense?

23 A Yes.

24 Q Okay. And since you've done this before, a
25 reminder that your testimony here today is just the same

1 as if you were testifying in court.

2 Do you understand?

3 A Yes.

4 Q Is there any reason why you are not able to
5 give truthful and accurate answers today?

6 A No.

7 Q And forgive this question, but I have to ask.
8 Are you currently taking any medication that would
9 impair your ability to testify truthfully and
10 accurately?

11 A No.

12 Q Mr. Jobin, what did you do to prepare for this
13 deposition?

14 A I met with counsel on the phone yesterday for a
15 while, maybe an hour and a half or so. I reviewed the
16 patents in suit, and I reviewed my three declarations
17 over the weekend, and that's about it.

18 Q And when you met with counsel on the phone
19 yesterday, do you know who was present on that call?

20 A It was just Tom Finch.

21 Q Tom Finch, okay. Did you speak with anyone
22 other than counsel to prepare for the deposition?

23 A No.

24 Q Did you take any notes during your meeting with
25 Mr. Finch yesterday?

1 A No.

2 Q Did you bring any other notes or documents to
3 this deposition today?

4 A I brought my three declarations in these
5 binders. They're unannotated, unmarked.

6 Q Okay. And I may take a look at them through --
7 through them during a break, but we can leave that for
8 now.

9 Are you being compensated for your time to
10 testify here today?

11 A Yes, I'm being paid for my work in this case.

12 Q And what is your hourly rate?

13 A For this matter, I'm billing \$400 an hour.
14 This is documented, also, in my declarations.

15 Q When did Danco's counsel first contact you
16 about this case?

17 A I remember getting a call from Tom back in the
18 fall, I think it was, of this -- of last year. Yeah,
19 sometime late last year.

20 Q Okay. Did you sign an engagement letter with
21 Danco?

22 A With the law firm that is hiring me on behalf
23 of Danco, but yes.

24 Q Do you recall when you signed that engagement
25 letter?

1 A I don't recall the date. It would have been
2 shortly after the initial call.

3 Q And you mentioned reviewing three declarations
4 that were submitted in each of these proceedings.

5 Did you write each declaration yourself?

6 A I write a large amount of them. Some of the
7 content comes from counsel, and some of the content is
8 derived from other documents in the case in terms of the
9 types of arguments that are made, but the analysis is
10 mine, the opinions are mine, and -- and, you know, I
11 stand by the documents that I've signed.

12 Q When did you first start working on the
13 declarations?

14 A It's been a -- they've been -- they've been in
15 your hands for about a month now or a little over a
16 month, and it would have been about a month prior to
17 that that we started working is my recollection, so,
18 yeah, it would have been early -- much -- like, early
19 this year is my recollection.

20 Q Okay. Did any Danco employee see drafts of
21 your declarations before they were submitted?

22 A I don't know.

23 Q Did Danco's counsel see drafts of your
24 declarations before they were submitted?

25 A I'm not aware of that.

1 Q Do you have anyone that worked with you on the
2 declarations? Apart from counsel, did anybody else work
3 with you on the analyses or the opinions that are
4 reflected in your declarations?

5 A No.

6 Q Roughly how many hours would you estimate you
7 spent writing each of the three declarations?

8 A I haven't looked at that, but I'm just thinking
9 back to -- I mean, it's several weeks' worth of work is
10 what I would say. So what does that, you know, add up
11 to? Less than -- probably less than a hundred hours all
12 totaled.

13 MS. ACHARAYA: All right. Let's go ahead and
14 mark -- how are we doing the exhibit marking? Can
15 we go off the record for a second?

16 (Discussion off the record.)

17 BY MS. ACHARAYA:

18 Q Let's take a look at Exhibit 2014, which is a
19 copy of the CV that was attached to your declarations.

20 Mr. Jobin, do you recognize this document?

21 A Yes.

22 (Exhibit 2014, Curriculum Vitae, was marked for
23 identification.)

24 Q Is this a complete reflection of your
25 experience and qualifications?

1 A This is a summary of all of the positions that
2 I've held and the patents that have been issued in my
3 name and is the document I've used for -- since at least
4 my recent posting -- since 2012, so over 10 years. This
5 reflects my experience, yes.

6 Q And I don't know if it's listed on there, but I
7 believe in your declaration you mention doing some work
8 for, I think, American Standard; is that correct?

9 A I did a consulting project with American
10 Standard while I was employed at Altitude, Incorporated.

11 Q Can you tell me more about that consulting
12 project with American Standard, please.

13 A American Standard approached Altitude looking
14 for concept ideation and prototype-development work in
15 the area of a toilet flush mechanism, and so I and, I
16 think, another member of my team worked together on
17 developing these concepts and prototypes under that
18 contract.

19 Q Do you know if any patents arose from the work
20 that you did for American Standard on that consulting
21 project?

22 A I'm -- I'm not aware of any that have issued,
23 and I don't think that any of that work that we
24 submitted was ultimately patented.

25 Q So, Mr. Jobin, if I understand correctly, you

1 have experience designing valves and fluid conduit
2 systems generally; is that fair?

3 MR. MAURER: Objection; form.

4 A I -- I've described a variety of experience
5 that involves fluidics ranging from consumer products to
6 medical devices to valves and fluidic devices, such as
7 two of my patents that I've listed in my -- in my CV, so
8 a wide range over the course of my career of fluidics
9 experience.

10 Q Tell me a little bit more about your experience
11 specifically designing fluidic devices for consumer
12 products.

13 A Well, I've provided some examples. I've
14 designed coffee makers. I've designed home humidifiers,
15 both portable and larger, so floor mounted and table
16 mounted. I've designed things like beer dispensing and
17 wine dispensing and liquor chilling, I mean, just all --
18 all kinds of things that involve moving fluids around
19 with tubing and fittings and valves.

20 And I've also been involved in medical devices,
21 which -- which have similar components; pumps, valves,
22 impellers, tubing, connections, all of those types of
23 things that are related to the subject matter we're
24 discussing today.

25 Q Would you agree with me that in a fluidic

1 system, when you're moving fluids around using tubings,
2 that the fewer connections you have that will increase
3 the reliability of the system as a whole?

4 MR. MAURER: Objection; form.

5 A I think it's difficult to generalize. It
6 depends on the pressure. It depends on the fluids that
7 you're moving, temperatures, materials, all kinds of
8 considerations. Sometimes you don't have a choice but
9 to have multiple connections for the system that
10 you're -- you've designed.

11 Sometimes that you -- sometimes you have the
12 ability to integrate those connections into a manifold,
13 for example, so there's just different factors that come
14 into play depending on what you're doing.

15 Q How does pressure play into it? You mentioned
16 pressure is one of the things that will impact design
17 considerations around connections; is that correct?

18 A Right. One of the issues that's discussed in
19 the patent's specification, which is shared across the
20 three patents, is that you're trying to -- it's good, in
21 their view, to avoid pressure in the tubing, because
22 pressure spikes over time can tend to work tubing loose
23 from fittings, as an example, and that can cause an
24 issue with the function of the device.

25 So a higher pressure or a higher-pressure

1 impulse that happens regularly in a system can cause
2 those types of failures to occur, so that's how pressure
3 plays into or is a factor in your choices.

4 Q So in that scenario where pressure is a
5 consideration, would having fewer connections for the
6 transport of fluid increase the reliability of the
7 system overall?

8 A Well, I would say that it's difficult to
9 generalize. It would depend on the specific system.

10 Q Okay. Does each point of connection introduce
11 a point of weakness in the system?

12 A Not necessarily. It depends on the integrity
13 of the connection and the materials and whether they're
14 designed according to design principles to ensure that
15 they're sealed.

16 Q Let's go ahead and take a look at your
17 declarations. This is Exhibit 2013.

18 Mr. Jobin, do you recognize this document?

19 A This is my declaration in regarding to the '105
20 patent, at least it appears to be an accurate copy. I
21 recognize my signature on the back.

22 (Exhibit 2013, Declaration of Michael Jobin,
23 was marked for identification.)

24 Q Okay. And is the declaration you submitted on
25 the '105 patent a complete reflection of your analysis

1 and opinions on the '105 patent?

2 A While I reserve the right to modify or augment
3 my opinions if additional information becomes available
4 to me, but as of the time of the writing of this, it
5 reflects my opinions and is complete in that regard.

6 Q And you submitted a declaration on the '993
7 patent as well, correct?

8 A Correct.

9 Q Was the declaration that you submitted on the
10 '993 patent a complete reflection of your analysis and
11 opinions on the '993 patent?

12 A As of the time that I wrote that, yes, it was a
13 complete reflection of my opinions reserving the right
14 to modify those or to augment my opinions should
15 additional information arise.

16 Q And you submitted a third declaration on the
17 '698 patent, correct?

18 A I did, yes.

19 Q And does the declaration you submitted on the
20 '698 patent -- is that a complete reflection of your
21 analysis and opinions on the '698 patent?

22 A That declaration also reflects my opinions as
23 of the time I signed that, subject to the disclaimer
24 that I may modify those or augment those should
25 additional information come to my knowledge.

1 Q Okay. Let's go ahead and mark Exhibit 1001.

2 Mr. Jobin, do you recognize this patent?

3 A This is a copy of the -- of Danco's '993
4 patent.

5 (Exhibit 1001, 9,139,993 Patent, was marked for
6 identification.)

7 Q All right. Let's go ahead -- we're going to
8 use that exhibit, so don't put that one away. We're
9 going to mark a couple more exhibits. This is also
10 going to be marked Exhibit 1001 from the 634
11 proceedings.

12 And, Mr. Jobin, I've just handed what's been
13 marked 1001-634. Do you recognize this document?

14 A This is the Danco '105 patent.

15 (Exhibit 1001-634, 9,103,105 Patent, was marked
16 for identification.)

17 Q Okay. And let's go ahead and mark 1001-635.
18 Mr. Jobin, do you recognize this document?

19 A Yes, this is the Danco '698 patent.

20 (Exhibit 1001-635, 10,934,698 Patent, was
21 marked for identification.)

22 Q Are these three patents the patents that you
23 reviewed while preparing your declarations?

24 A Yes.

25 Q If you turn to the '993 patent and take a look

1 at the claims -- that starts on page 16 and goes to
2 page 17. Let me know when you're there.

3 A Okay.

4 Q None of these claims mention plastic or any
5 other material, correct?

6 A What I see is mentioned to the claim term
7 "integrally molded with," but I don't see the word
8 "plastic" or other material mentioned here.

9 Q And so my question was just, none of the claims
10 mention plastic or any other material, correct?

11 MR. MAURER: Objection; asked and answered.

12 A What I stated is that "plastic" or other
13 materials are not mentioned in these claims.

14 Q Okay. And if you take a look at the '105
15 patent -- let's take a look at those claims. It starts
16 on page 16.

17 A Got it.

18 Q None of these claims mention plastic or any
19 other material, correct?

20 A I see the term "integrally molded with" again,
21 but I don't see the term "plastic" or other materials
22 mentioned in these claims.

23 Q Right. And, again, just so that we're clear on
24 the question here, my question is simply that none of
25 the claims mention "plastic" or any other material,

1 correct?

2 MR. MAURER: Objection; asked and answered.

3 A As I stated, I don't see the word "plastic" or
4 other materials in these claims.

5 Q All right. Let's take a look at the claims of
6 the '698 patent. Again, they start on page 16. Let me
7 know when you're there.

8 A I'm on page 16.

9 Q Okay. And none of the claims of the '698
10 patent mention plastic or any other material, correct?

11 A Looking at these claims in the '698 patent, I
12 don't see the word "plastic" or other materials
13 mentioned, but I do see reference to a snap fit, which
14 informs me as one of ordinary skill that that type of
15 material would be required, or would be implied at
16 least, but the words are not used here in these claims.

17 Q And these claims don't use the term "integrally
18 molded" -- I'm sorry. Strike that. Let me start again.

19 The claims of the '698 patent don't use the
20 term "integrally molded," correct?

21 A The claim term "integrally molded with," which
22 is used in the other two patents, does not appear in the
23 claims for the '698.

24 Q And the specification of the -- these three
25 patents doesn't mention plastic or any other material

1 for these structures, correct?

2 MR. MAURER: Objection; form.

3 A It's my recollection from reading these patents
4 before and recently and just scanning through it now
5 that the term "plastic" is not used directly, but lots
6 of concepts related to "integrally molded with" are
7 discussed, which brings me to the conclusion that
8 plastic material is used in these embodiments that are
9 described in various ways, but the word "plastic" does
10 not appear in this specification, to my understanding.

11 Q And Danco has never told the patent office that
12 its claims in these three patents cover only plastic
13 structures, correct?

14 MR. MAURER: Objection to form.

15 A I'm not sure all of what Danco has told the
16 patent office, so I don't think I could answer that.

17 Q Let's focus on the -- just so we're all looking
18 at the same document, let's take a look at the
19 specification of the '105 patent. If you go to
20 Column 2, Line -- starting at Line 40, four zero, this
21 is the sentence that starts, "Thus, the bowl fill valve
22 109." Let me know when you're there.

23 A Yes, I'm on Column 2, Line 40.

24 Q So the specification makes it clear that a bowl
25 fill valve is configured to supply an adjustable flow of

1 water, correct?

2 A Right. What it says in this sentence is "the
3 bowl fill valve 109 is configured to supply an
4 adjustable flow of water." That's what it says here.

5 Q And if you take a look at Column 3, Line 65,
6 the sentence there starts, "The bowl fill valve 109 is
7 configured to supply the adjustable flow of water," and
8 then it continues; do you see that?

9 A I see that sentence, yes.

10 Q Again, here the specification is making it
11 clear that the bowl fill valve 109 is configured to
12 supply the adjustable flow of water, correct?

13 MR. MAURER: Objection; form.

14 A What the sentence says -- Column 3, Line 65, it
15 says, "The bowl fill valve 109 is configured to supply
16 the adjustable flow of water."

17 Q I'm sorry. Did you finish your --

18 A Oh, yes. I was just citing that -- back the
19 portion that you asked me about.

20 Q And so what the specification is describing
21 here is the bowl fill valve 109 supplies an adjustable
22 flow of water into the bowl during the flush cycle,
23 correct?

24 A Well, what -- what it -- what it says is what I
25 stated to you. I don't think I -- it says anything

1 different from that. It says specifically, "The bowl
2 fill valve 109," which is describing this particular --
3 describing this to the reader is -- "The bowl fill valve
4 109 is configured to supply the adjustable flow of
5 water," that's what it says.

6 Q And then the sentence goes on to make it clear
7 that it's the -- supply the adjustable flow of water to
8 the toilet bowl during the flush cycle, correct?

9 A Well, it doesn't say that. It says that it is
10 configured to supply the adjustable flow of water out
11 the bowl fill valve outlet through the tube 146 and into
12 the overflow to 149, which ultimately goes to the bowl,
13 so it's a little more specific than what you stated.

14 Q That's fair. I was paraphrasing.

15 But am I right in thinking that the bowl fill
16 valve 109 supplies what the patent describes as an
17 adjustable flow of water? Is that correct?

18 MR. MAURER: Objection to form.

19 A It's describing steps that can be taken to tune
20 or adjust the flow of water to -- delivered to the bowl
21 during the flush cycle. This can be done a variety of
22 ways, but this is describing how it could be done in
23 this particular example.

24 Q And the specification allows for adjustments to
25 the bowl fill valve 109 after it's been installed; is

1 that correct?

2 A If those are desired, this system allows one to
3 adjust that flow that's described elsewhere in the spec.

4 Q If you turn to Column 4 starting at Line 48 --
5 excuse me. That's not the right reference there. It is
6 Column 5 starting at Line 33. It's the sentence
7 starting "during the life cycle of the bowl fill valve."

8 A I see that sentence.

9 Q And I'll let you read that full sentence. Let
10 me know when you're done.

11 A Go ahead.

12 Q Is this one of the examples where the bowl fill
13 valve may be adjusted after it has been installed?

14 A What it states is that "During the life cycle
15 of the bowl fill valve 203," which is a different number
16 from the one described earlier, "it may be possible that
17 the bowl fill valve is adjusted."

18 So it's saying that if down the road you wanted
19 to, it may be possible to do so, and that, I think,
20 would depend on the type of bowl fill valve or other
21 device that you were using.

22 Q All right. Let's take a look at Figure 3 of
23 this patent. This is back on page 5.

24 A All right, Figure 3.

25 Q So looking at Figure 3, the tube that's labeled

1 146 here, that's directing water from the bowl fill
2 valve to an overflow tube; is that correct?

3 A It's my understanding that tube 146 is directed
4 to overflow tube 149 in Figure 3.

5 Q And the opening of the tube 149, is that above
6 the water level in the tank?

7 A The nature of the function of 149 is that the
8 top of it is above the surface of the water in the tank.

9 Q What is the nature and the function of 149?

10 A Well, it's called an overfill or overflow tube.
11 And I'm just going to the description that it uses here
12 for the description of Figure 3. Yeah, what it states
13 here is that the overflow tube of -- is connected to the
14 toilet tank. It directs water to the tank.

15 And in my declarations I've described
16 additional functions that one of ordinary skill would
17 appreciate. One is that it prevents the tank from
18 overfilling in the case of a valve failure with the fill
19 valve, and it also provides a break in the case of
20 siphoning, which would happen in a negative-pressure
21 condition in the water supply to prevent toilet water
22 from being pulled into the water supply.

23 Q And I might have misheard you, but I thought
24 you said that the overflow tube 149 directs water into
25 the tank. Did you mean bowl?

1 A If I said tank, I meant that the tube 149 is
2 connected to the bowl according to the specification.

3 Q Okay. And I see in Column 4 of the
4 specification at Line 2 the patent mentions that no
5 pressure is seen within the tube 146; do you see that?

6 A I see that sentence, yes.

7 Q And what does that mean; no pressure is seen
8 within the tube 146?

9 A What I understand that to mean is that here
10 they're talking about in other cases a bowl fill valve
11 or restriction is placed in the middle of tube 146.
12 Usually it's connected to both ends of the tubing. And
13 that the pressure that comes from the supply line is,
14 therefore, present in that tube.

15 This specification describes a new invention in
16 which that bowl fill restriction or valve is placed into
17 an integrally molded with feature of the valve body in
18 order to prevent that pressure from being developed in
19 the tube.

20 So the pressure that is beyond the valve or
21 flow restriction, as described in these patents, is
22 lowered because of the restriction that is imposed by
23 that device, and the tubing, therefore, sees a
24 low-pressure flow of water into the overflow tube.

25 Q Is it a low pressure of water or no pressure?

1 A Well, relatively speaking it's no. I would say
2 that it's low because the pressure is held back by the
3 restrictor or by the restriction imposed by the valve in
4 this case and -- or whatever other device you would use
5 before it -- the water gets into the tube and,
6 therefore, from there going through the tube it's -- it
7 doesn't have any -- the tube is open at the other end,
8 and it's draining into the overflow tube at low pressure
9 or no -- in this case it says "prevents the creation of
10 a pressure head."

11 I understand a pressure head to be what's
12 present in the supply line. When you open the tap,
13 water comes out with force because there's pressure in
14 the water supply. And this is stating that this
15 configuration prevents that pressure that's within the
16 water supply from being transferred into this tube.

17 Q Given that there is low pressure, or as this
18 patent says, no pressure within the tube 146, couldn't
19 you connect tube 146 below the waterline to the overflow
20 tube?

21 MR. MAURER: Objection to form.

22 A I'm not sure I understand your question.

23 Q So in Figure 3 we see tube 146 connected to the
24 overflow tube 149, correct?

25 A We see 146, which is a small-diameter tube,

1 inserted into the overflow or overfill tube 149, which
2 is depicted as a large-diameter tube. That's what I see
3 here.

4 As to whether that would happen underwater, I
5 don't think I understand that to be the case at all.
6 The overfill or overflow tube is above the level of the
7 water, because that's the nature of what it's intended
8 to do.

9 Q So the point of insertion in Figure 3 is at the
10 opening of the overflow tube, which is above the
11 waterline, correct?

12 A It is my understanding that that is the case,
13 yes.

14 Q Couldn't you instead direct tube 146 to a
15 connection on the overflow tube 149 where that
16 connection is under the water level?

17 MR. MAURER: Objection; form; foundation.

18 A That's not depicted in these patents.

19 Q I'm talking more generally than Figure 3. I'm
20 asking if you have a tube such as 146 that's directing
21 water from a regulator to an overfill or overflow tube,
22 couldn't that point of connection be below the water
23 level even if the opening of the overflow tube is above
24 the water level?

25 MR. MAURER: Objection; form; foundation.

1 A I think that that configuration would defeat
2 the function of the overfill or overflow tube. I don't
3 think that one of ordinary skill would think that is
4 something you would do.

5 Q Why would that defeat the purpose of the
6 overflow tube?

7 A Well, it would defeat the siphoning -- the
8 anti-siphoning characteristics for one, and then
9 second -- well, I think that's the primary one that
10 comes to mind.

11 And that's just not what's shown here. I mean,
12 I can't speak generally or hypothetically to all of the
13 potential configurations, but in my understanding of how
14 this is depicted and what one would do, connecting
15 directly to the overfill tube below the water doesn't
16 make sense to me.

17 Q And you mentioned anti-siphoning as one of the
18 issues. Can you tell me a little bit more about why
19 that's a problem here?

20 A Well, I've described that in my declarations,
21 and I'm -- what I've stated is that the reason why the
22 tubes are not connected in an air-tight fashion is
23 because of this anti-siphoning function of the system.
24 It's designed to prevent soiled water from being pulled
25 into the water supply in the case of a negative-pressure

1 condition in the supply. That's what this -- that's
2 what this configuration achieves.

3 Q Does the -- do the patents describe the
4 anti-siphoning functionality as one of the benefits of
5 this configuration?

6 A It does not focus on that aspect of -- or
7 benefit. It's just that that is what this configuration
8 means. That's what -- you know, again, to one of
9 ordinary skill looking at this configuration, one
10 understands that function to be present here. I don't
11 recall it being described in any words in this
12 specification beyond what we see here in Figure 3.

13 Q Is it your opinion that the tube 146 in
14 Figure 3 ascends from the point of attachment with the
15 bowl fill valve 109?

16 A Well, that's what's depicted in Figure 3.

17 Q So your opinion, just so I'm clear, is that
18 that point of attachment between 109 and 10 -- excuse
19 me -- 109 and 146, that is the tube ascending from the
20 point of attachment; is that correct?

21 A What I see in Figure 3 is a tube attached to
22 the outlet port of the flow adjuster and going
23 horizontally for a bit, and then it rises and then
24 curves and points at the top of the overfill tube 149.
25 So, yes, it is ascending in this figure.

1 Q At the point where it attaches at 116, the tube
2 146 is shown as horizontal, correct?

3 A Yes, and that makes sense because it's being
4 connected to some type of fitting that's horizontal, but
5 it curves upwardly and then it curves downwardly, but
6 overall the tube is ascending from the point of
7 connection.

8 Q Let's take a look at Exhibit 1014. Mr. Jobin,
9 do you recognize this document?

10 A This is -- appears to be a patent that I cited
11 in one of my declarations where I was discussing issues
12 related to what we've been discussing in the last
13 several minutes. This is the '568 patent, also to
14 Schuster, and it's my understanding that this is a Danco
15 patent from early 2003 or in that timeframe.

16 (Exhibit 1014, 6,546,568 Patent, was marked for
17 identification.)

18 Q And I'll direct you to Figure 1 of this patent.
19 Do you see a tube marked 33 there? I'm sorry, it's in
20 Figure 1.

21 A Figure 1?

22 Q Yeah.

23 A Yes, I see a tube 33.

24 Q Do you know what that tube is? And if it's
25 helpful, I'll also direct you to Column 3 starting at

1 Line 41.

2 A Yep, I'm there. What it says is that the
3 tube 33 is connected to discharge spout 31 and the other
4 end positioned to discharge water into the pipe 14,
5 which is analogous to the overfill or overflow tube that
6 we've been discussing in the patents in issue.

7 Q Okay. And so in Figure 1 what we're seeing is
8 a tube 33 that's connected to an overflow pipe or
9 overflow tube 14, correct?

10 A They describe it as pipe 14, but, yes, you're
11 seeing a tube 33, which is delivering water to the
12 overfill pipe, or pipe 14 in this case.

13 Q And if you look at Figure 41, tube 33 initially
14 descends from the point of attachment to the fill valve,
15 correct?

16 A Could you clarify? You're talking about
17 Figure 41?

18 Q Figure 1.

19 A In Figure 1.

20 Q Tube 33 --

21 A Yes.

22 Q -- is shown as initially descending from the
23 point of attachment to the fill valve, correct?

24 A Well, it -- it droops a little bit, and then it
25 goes up, and then it curves down to point at the top of

1 the overfill tube, or pipe 14. So it's shown with both
2 a downward and an upward curve in this instance.

3 Q You can set that aside. Let's go ahead and
4 mark Exhibit 1021. Mr. Jobin, do you recognize this
5 document?

6 A This is the prior art reference called Brown.
7 (Exhibit 1021, Brown Prior Art, was marked for
8 identification.)

9 Q And let's go ahead and refer to this exhibit as
10 Brown going forward. Take a look at Figure 4, which is
11 on the bottom left-hand corner of the first page there
12 of Brown.

13 Do you see that Figure 4?

14 A I see Figure 4, yes.

15 Q Do you see a tube marked 28 there?

16 A I see a tube marked 28 in Figure 4, yes.

17 Q Do you know what that tube is?

18 A It says here in the description -- in Column 4,
19 Line 34 through 36, it says, "The other end of U-shaped
20 tube 31 is inserted into the relatively long flexible
21 tube 28 which is connected to the overflow pipe 11 as in
22 Figure 1."

23 Q And what is the portion labeled 31 in Figure 4?

24 A Well, the embodiment of Figure 4 is describing
25 the water silencing and saving means. It's a bundle of

1 tubes which is intended to make the toilet quieter when
2 it's refilling the tank and the bowl, and it's an
3 alternate configuration to Figure 1.

4 In Figure 1 you've got the more conventional
5 tube, which is ascending and then pointing into the top
6 of the overfill or overflow tube, as shown in Figure 1.
7 Here water's being delivered to the top of that overfill
8 tube through an alternate path.

9 Q And so in Figure 4 -- what function does the
10 smaller tube 31 have in the configuration shown in
11 Figure 4?

12 A In combination with the other tubes 22, it's
13 splitting the flow from -- most of the flow is going to
14 tank refill, and then one of the tubes, in this case
15 31 -- smaller tube 31 replaces one of those silencing
16 tubes, and it states here "forming the desired
17 restricted opening."

18 So it's a flow restriction which directs a
19 smaller portion of water to the overfill or overflow
20 tube, so it's an alternate embodiment to Figure 1.

21 Q And you mentioned that it's a flow restriction
22 that directs a portion of water to the overflow or
23 overfill tube.

24 Does it do that via tube 28 in Figure 4?

25 A It states here, Column 4, Line 30, "smaller

1 tube 31 forming the desired restricted opening. This
2 relatively short tube 31 is bent into a substantially
3 U-shape, and one end is inserted into fill tube 20,
4 being held securely in place therein by the water
5 silencing rods 21. The other end of the U-shaped tube
6 31 is inserted into the relatively long flexible tube 28
7 which is connected to the overflow pipe 11, as in
8 Figure 1."

9 So, yes, it basically -- 28 is connected to the
10 flow-restriction short tube 31 and directs the water to
11 the overfill tube.

12 Q And tube 28 where it attaches to tube 31, it
13 ascends from that point of attachment, correct?

14 A Yes, that's true, it does ascend from the point
15 of attachment.

16 Q And then it descends into the overflow pipe 11,
17 correct?

18 A It rises over the level of the overfill pipe
19 and then directs the water into the top of the pipe.

20 MS. ACHARAYA: All right. We have been going
21 for about an hour, so why don't we take a
22 five-minute break here. Is five minutes okay?

23 THE WITNESS: Yeah.

24 (Recess held.)

25 BY MS. ACHARAYA:

1 Q All right, Mr. Jobin, let's go ahead and mark
2 Exhibit 1022. Mr. Jobin, do you recognize this
3 document?

4 A This is the prior art reference known as Ho.
5 (Exhibit 1022, 5,862,538 Patent, was marked for
6 identification.)

7 Q Okay. And if you take a look at Figure 1 of
8 the Ho patent --

9 A Figure 1, yes.

10 Q -- what is tube 40, four zero, in this figure?

11 A The patent specification, Column 3, Lines 15 to
12 17, it's called a transverse supply line 40 connected to
13 and supplying water to the rim flushing rim conduit 54.

14 Q And it receives water from the water supplying
15 pipe 21, correct?

16 A Further up that sentence, it states that "the
17 diverter valve means 30 of the present invention
18 includes a hollow valve housing 31, a transverse inlet
19 pipe (21b) which receives water from the water supplying
20 pipe 21, and a transverse supply line 40 connected to
21 and supplying water to the rim flushing rim conduit 54."

22 So what I see is that it doesn't state
23 specifically, but you can tell from the figure that it
24 is connected to the outlet -- or an outlet of the
25 diverter valve means 30 at the -- at one end. And at

1 the other end it's connected to the rim flushing rim
2 conduit 54.

3 Q And the point of connection between the
4 diverter valve means 30 and this tube 40, that's not
5 labeled in Figure 1, correct?

6 A No. It's described in more detail elsewhere,
7 but not in Figure 1.

8 Q Okay. Do you know, looking at Figure 1, where
9 the point of attachment between diverter valve means 30
10 and tube 40 is in that figure?

11 A Well, I can see that it is connected to --
12 again, I'm not looking at Figure 1 just in a vacuum. I
13 have read the specification and other figures, so I
14 understand it to be connecting to the -- to the -- to
15 kind of like an outlet port on the diverter valve.

16 Q Looking at Figure 1 in the context of having
17 read the rest of the Ho patent, can you point me to the
18 point of attachment of the supply line 40 to the
19 diverter valve means 30 in that figure?

20 A Well, what I would say is that the tube itself,
21 40, has sort of a characteristic of a tube, which is
22 that it has sort of these large radius bends, so it
23 arced down, then it arcs up.

24 And then right underneath the translation arm
25 that is attached to the float, there's a 45-degree

1 elbow, sort of a sharp turn, that is not characteristic
2 of this tubing according to the rest of the
3 illustration, and so I would say that there's a little
4 line there where it looks like the tube is attached to
5 the outlet port of the diverter valve.

6 Q Would you mind circling that?

7 A Sure. And so that -- that's, again, sort of
8 based on what I'm seeing in Figure 2 where the tube is
9 attached to a piece of plastic that's coming out of the
10 diverter valve. It's not a hundred percent certain, but
11 that's my best estimate as to where it attaches.

12 Q And if we assume you're right, that that's the
13 point of attachment, the supply line 40 is descending
14 from that point of attachment, correct?

15 A It descends initially and then it rises to a
16 point above the point of attachment.

17 Q Okay. All right. Let's turn to Figure 7 of Ho
18 and --

19 A Okay.

20 Q I'm sorry. Are you there?

21 A Go ahead.

22 Q Can you describe to me what is being shown
23 generally in Figure 4 -- excuse me -- Figure 7?

24 A In the brief description of the drawings
25 section, Column 2, Lines 34 through 37, it describes

1 Figure 7 as "a partly sectional view illustrating the
2 float-controlled valve means in the water supply tank
3 when actuated to permit water from the water supplying
4 pipe to flow into the valve diverter means."

5 Q Okay. So this is the point of attachment
6 between the diverter valve means 30 and the fill valve;
7 is that correct?

8 A It calls it a float-controlled valve means, and
9 so it's showing -- it's not clear which float they're
10 talking about here, but the portion of the assembly
11 that's in section view is the diverter valve, which is
12 generally described, I think, as 30 elsewhere. Yes.
13 And so it's showing that in section view to inform the
14 reader as to what's inside the diverter valve and how it
15 works.

16 Q And if you look at Figure 7 at that point where
17 the 21(b) exits the fill valve and runs across to the
18 diverter valve means 30, do you see that there's two
19 separate sets of crosshatchings surrounding that
20 Line 21(b)?

21 A The crosshatching is depicted in two different
22 angles. One is sort of down and to the right, and the
23 other is down and to the left. So in the area
24 surrounding 21(b) I see two different crosshatching
25 patterns in this figure.

1 Q And what do the two different crosshatching
2 patterns signify to you?

3 A Well, what's being described here and what I
4 understand is going on is that the valve diverter
5 assembly is inserted into a port that is a part of the
6 fill valve assembly.

7 Q And when you say a port that is part of the
8 fill valve assembly, what do you mean by that?

9 A Let me just go to it. One moment. I used a
10 term that's not what they use, but they call -- well, in
11 Figure 7 you see the number 22 up at the top, and that's
12 called the ballcock valve 22.

13 So water comes in the supply pipe through the
14 bottom, and then when the toilet is flushed, the main
15 float 252 drops with the level of the water opening the
16 valve, and then the water is allowed to flow through the
17 connection that we see here in section view at 21(b)
18 into the diverter valve.

19 Q And when you say that the -- I'm sorry. Let me
20 strike that. Is the crosshatching -- let's use another
21 exhibit, actually. Let's pause here.

22 MS. ACHARAYA: Can we go off the record for a
23 second?

24 (Discussion off the record.)

25 MS. ACHARAYA: Let's go back on the record.

1 Thank you.

2 BY MS. ACHARAYA:

3 Q I'm going to go ahead and mark as Exhibit 9 to
4 Mr. Jobin's deposition -- Mr. Jobin, I'm handing you a
5 demonstrative that we prepared for the deposition today.
6 It is -- if you look at the bottom figure on this page,
7 we essentially zoomed in on Figure 7 and then added
8 orange and blue annotations for the two different sets
9 of crosshatchings.

10 Do you see that on Exhibit 9?

11 A I don't recall this figure being used in
12 Dr. Cameron's declarations. Can you let me know if it
13 was?

14 (Exhibit 9, Figure 7 Demonstrative, was marked
15 for identification.)

16 Q It was not, no. We prepared this for today's
17 deposition. And I'll represent to you that what we did
18 was zoom in on Figure 7 and add the colors that you see
19 on Exhibit 9.

20 A What I see here is that this is an enlarged
21 detailed view of Figure 7 of the -- of the '538 Ho
22 reference and that certain parts of it have been colored
23 for -- presumably to help us discuss them. So I do see
24 that, and it does appear to be a true representation --
25 an enlarged representation of Figure 7 in one specific

1 area of detail.

2 Q And you testified earlier that the diverter
3 valve means is connected to what you termed the port of
4 the fill valve assembly.

5 Is the portion that's annotated in orange the
6 port of the fill valve assembly to which you referred to
7 earlier?

8 MR. MAURER: Objection; foundation.

9 A I'm not seeing a specific call-out that gives
10 name to the valve assembly other than the ballcock valve
11 22 in general, but that valve assembly has, according to
12 this figure, a port into which another part or assembly
13 is inserted, and so what I see in orange -- it's a bit
14 complicated because this is what's known as a
15 partial-section view or a partly sectional view.

16 What they've done is they've cut away some
17 material locally to provide a small window into what's
18 happening inside the device, but they haven't cut the
19 section line through the whole valve, which would be
20 more informative.

21 So what I see here -- I mean, to me it looks
22 like the orange part is inserted into that valve, but
23 there's no way to know for sure because I don't have
24 enough information to determine. It's part of the
25 assembly, but whether it's integrally formed with, I

1 cannot tell.

2 Q If you take a look at Figure 5 of Ho --

3 A All right. I see Figure 5.

4 Q Figure 5 depicts all of the components of Ho's
5 diverter valve means 30, correct?

6 A Figure 5 is what's known as an exploded
7 assembly view. The various parts are shown separate but
8 in close proximity to their mating parts and others to
9 help understand all of the components and how they go
10 together.

11 Q The part that's annotated orange in Exhibit 9,
12 that's not one of the components that's shown in
13 Figure 5, correct?

14 MR. MAURER: Objection; foundation.

15 A The part that is in Exhibit 9 that's annotated
16 in orange, in my view, is not part of diverter valve 30.
17 It is -- it's separate from diverter valve 30; that's
18 why it's illustrated with the crosshatching that's in a
19 different orientation.

20 Q But you testified earlier that you can't tell
21 whether the orange part in Exhibit 9 is a single
22 structure with the body of the fill valve, correct?

23 A What I was -- I was not referring to valve 30
24 in that case. In that answer I was referring to the
25 valve body to the left in this figure. What I can tell

1 from this figure is that it does not appear to be part
2 of the diverter valve assembly 30. That is made clear
3 by these figures.

4 Q Is it your testimony that the orange part is
5 also not a part of the valve body to the left of the
6 figure in Exhibit 9?

7 MR. MAURER: Objection; foundation.

8 A Well, I've discussed similar figures in my
9 declarations. I've not discussed Figure 7 or this
10 detail view. What I have stated as my opinion is that
11 Ho does not disclose a port that is integrally formed
12 with or integrally molded with. It's not possible to
13 tell from this figure or other figures in Ho whether
14 that's the case.

15 Q All right. Can I have you turn to Figure 2 of
16 Ho, please. And it might be helpful if you also refer
17 back to Exhibit 2013, which was your declaration, at
18 page 65.

19 A All right. I've got Figure 2 of Ho, and I've
20 got page 65 of Exhibit 2013, which is my declaration
21 related to the '105 patent.

22 Q And, unfortunately, we only have printouts in
23 black and white, so let me show you your declaration,
24 Exhibit 2013, as it was originally submitted in color.
25 And I'll allow counsel to take a look as well.

1 Can you confirm that this was the colored
2 version that was submitted in your declaration?

3 A Well, it looks familiar. I could refer to my
4 version, if that --

5 Q Of course.

6 A -- if you don't mind.

7 Q And what I will have you do, so that our
8 discussion is a little bit easier, is -- in Exhibit 2013
9 on page 65, perhaps you could use crosshatching or some
10 other way to signify the two different color annotations
11 that you used in your declaration as submitted.

12 A Okay. So which document am I annotating?

13 Q This one here.

14 A Okay. So this is the --

15 Q Exhibit 2013, page 65.

16 A Yes, Exhibit 2013, page 65 printed in black and
17 white, and I am annotating the Figure 2 of Ho. Okay.
18 Go ahead.

19 Q I -- so my question is: Can you annotate that
20 to show the annotations that were in color in the
21 original declaration that you submitted, the two
22 differences in the color?

23 A Oh, so that it's clear in this exhibit?

24 Q Correct.

25 A Yes. What I will do is I will mark with

1 crosshatching the orange component that appeared in my
2 figure on page 65 of my Exhibit 2013 with a crosshatch
3 pattern, and then I will call that out as "orange."

4 Q Great. Thank you.

5 A Okay.

6 Q Thank you, Mr. Jobin. The portion in Exhibit
7 2013 that you have marked as -- in crosshatching, that's
8 not separately labeled in Figure 2 of the Ho reference,
9 correct? Figure 2 is right there in front of you as
10 well.

11 A Yep, I see it. What I'm remembering is that I
12 was highlighting what I view to be the extended portion
13 of the toilet fill valve. These are terms that derived
14 from the specification of the patents in suit. And --
15 and in forming my analysis, it's important to be able to
16 point with clarity as to what I'm talking about.

17 So it's not described that way in Ho as a
18 separate component, but my understanding based on my
19 analysis is that I'm pointing to that feature as the
20 extended portion.

21 Q And is that extended portion in Figure 2 of Ho
22 that you've annotated for us a single structure with the
23 body of the toilet fill valve to the left of it?

24 A It's not possible for me to determine that.

25 Q If that portion was not a single structure with

1 the body of the toilet fill valve, how would it be
2 connected to the body of the toilet fill valve?

3 MR. MAURER: Objection; foundation.

4 A There could be any number of ways that it would
5 be connected. If it's formed as a separate part, it
6 could be soldered or brazed in place. It could be
7 screwed in place, threaded in place. There's a variety
8 of ways that the second part could be attached to the
9 main body in this example.

10 Q And sticking with Figure 2 of the Ho patent,
11 what is the pipe labeled 40 there, four zero?

12 A Ho refers to 40 as the transverse supply line
13 40 as read on Column 3, Lines 15 and 16.

14 Q And you testified earlier that the Line 40 is
15 attached to the diverter valve means 30 of Ho, that
16 point of attachment you showed for us in Figure 1,
17 correct?

18 MR. MAURER: Objection to form.

19 A I remember testifying that the tube 40 attaches
20 in Figure 1. It also attaches in other figures. For
21 example, in Exhibit 9 that we just talked about, it's
22 shown at the top of the page as a tube that would be
23 connected to the port that comes out of the diverter
24 valve 30.

25 Q All right. Let's set Ho aside for the moment.

1 Let's go ahead and mark Exhibit 1029.

2 Mr. Jobin, do you recognize this document?

3 A I don't recall reviewing this document. If I
4 have, I would have listed it in my documents that I
5 reviewed in the -- in my declarations. It's confusing
6 because it has a 105 at the end of the patent number,
7 but it's not the '105 that we're discussing. It's also
8 listed as a Schuster patent, so I assume it's
9 potentially in the family. It looks somewhat familiar,
10 but I don't recall reviewing this document.

11 (Exhibit 1029, 8,104,105 Patent, was marked for
12 identification.)

13 Q Would it help your recollection if I told you
14 this is the reference that Fluidmaster is asserting
15 anticipates the '993 and the '105 patent?

16 A Oh, so prior art reference Schuster --

17 Q Correct.

18 A -- as referred to in the declarations? Yes,
19 that does help refresh my recollection. Thank you.

20 Q And so I would like you to turn to Column 6
21 starting at Line 1, that first paragraph in Column 6.
22 Go ahead and have a read of it and let me know when
23 you're done.

24 A Did you say the whole column or just a
25 particular paragraph?

1 Q Just Lines 1 through 10, the first paragraph,
2 please.

3 A Okay. Go ahead.

4 Q This patent is describing molding port 206 to
5 the body 209, correct?

6 MR. MAURER: Objection; form.

7 A What I see here, it states that "the body 209
8 of the toilet fill valve 200 may be constructed with the
9 bowl fill outlet port 206 using a molding process that
10 is much less complex than attempting to mold the entire
11 bowl fill valve 203 within the structure of the body
12 209," so it's describing a simpler molding process for
13 the construction of this valve, toilet fill valve 200.

14 Q So in this paragraph, the patent is describing
15 constructing bowl fill valve 203 as a separate component
16 to the body 209, but the bowl fill outlet port 206 is
17 molded with the body of toilet fill valve 209, correct?

18 A I think that you've summarized that correctly.
19 I understand that the bowl fill outlet port is
20 constructed using a molding process as part of the body
21 209 and that the valve itself -- the bowl fill valve 203
22 valve assembly is separately constructed and assembled
23 as a separate component later.

24 Q Okay. You can set that to one side. Let's go
25 ahead and mark Exhibit 2007. Mr. Jobin, do you

1 recognize this document?

2 A This is a certified translation of the prior
3 art reference Guoxin, G-u-o-x-i-n, and it is further
4 annotated with line numbers on pages 25 -- I'm sorry --
5 on pages 4 through 6, to help with the citations.

6 (Exhibit 2007, Linguist Certification, was
7 marked for identification.)

8 Q Please turn to Figure 2. Do you see label 403
9 there?

10 A I see 403, yes.

11 Q What is your understanding of what is labeled
12 403?

13 A The translated spec on page 5 at Line 20
14 describes 403 as a water supply pipeline.

15 Q And what is your understanding of the function
16 of the water supply pipeline 403?

17 A On page 5 at Line 20, it states "the water
18 supply pipe" -- I'm sorry -- "the water supply line
19 403" -- it didn't say "pipeline" this time; it just said
20 "line" -- "is directed to the toilet to directly provide
21 water supply to the toilet."

22 Q And what is your understanding of what's being
23 described there?

24 A Well, in my view, it means exactly what it
25 says. It says that "the water supply line 403 is

1 directed to the toilet to directly provide water supply
2 to the toilet," so it's -- the toilet in this case is
3 the toilet bowl. It's directing water to the toilet
4 bowl as part of this invention.

5 Q The water supply line 403 in Figure 2 is only a
6 partial view of that line 403, correct?

7 A It's shown in Figure 2 schematically with a
8 dashed line, but it's indicating that the line connects
9 to port 402 and then descends under the waterline -- it
10 actually starts under the waterline, according to
11 Figure 2, and based on the text specification I'm able
12 to understand where it's directed, which is directly to
13 the toilet bowl.

14 Q But Figure 2 doesn't show the terminus of that
15 line, correct?

16 A Well, Figure 2 is understood within the context
17 of the specification to direct water directly to the
18 bowl.

19 Q In Figure 2 you don't see the terminus of the
20 line 403, correct?

21 MR. MAURER: Objection; asked and answered.

22 A Figure 2 does not show a terminus, but the
23 specification makes it clear where that terminus would
24 be.

25 Q And what portion of the specification makes

1 that clear to you as to the terminus of line 403?

2 A I previously cited to page 5, Lines 20 to 23
3 where it states -- oh, wait. I'm sorry. Wrong page.
4 Lines 20 to 21. And, again, it's just very clearly
5 stated here that the water supply line 403 is directed
6 to the toilet to directly provide water supply to the
7 toilet, so it's just -- it's -- it's telling me exactly
8 what it's doing.

9 And overall my understanding of this is that
10 the toilet's -- that the problem that it's attempting to
11 solve is for these one-piece toilets which have, quote,
12 insufficient water-storage capacity in the tank. That's
13 in page 4, Lines 3 and 4.

14 So this is directing water to the tank during
15 the flush -- or to the bowl to augment the small tank
16 volume. To add water directly to the bowl during the
17 flush cycle is the intention of this connection.

18 Q And is your testimony that you understand the
19 terminus of line 403 to be at the bowl based on the
20 disclosure of the water supply line 403 being directed
21 to, quote, directly provide water supply to the toilet?
22 Am I understanding that basis of your opinion correctly?

23 A I think you've summarized my answer accurately.
24 I'm basically just reading the -- what the specification
25 says about that directly to you, and that's -- that

1 forms the basis of my understanding.

2 Q If you go back to page 1 of this reference,
3 which is page 4 of the exhibit, and take a look at
4 Lines 5 through 7 there, it says -- and I quote --
5 "Therefore, each time the toilet is flushed, a portion
6 of the water from the inlet device is directly supplied
7 to the toilet bowl to compensate for the lack of water
8 in the tank, thereby ensuring the toilet is flushed
9 clean in a single flush"; do you see that?

10 A I see that sentence, yes.

11 Q So in that sentence this patent is describing
12 water flowing from the inlet device and, quote, directly
13 supplied to the toilet bowl, correct?

14 A Well, the way that I understand that this
15 works -- I'm referring briefly to Figure 1 -- or
16 Figure 2 for that matter, rather, you have water coming
17 into the valve, and during the flush cycle; that is,
18 when the float 2 drops with the water level, water is
19 open to flow out the bottom of the supply pipe near the
20 bottom of the tank and through the water supply
21 switching device, which is labeled 405 in Figure 2.

22 So there's water going into the tank to refill
23 the tank and there's water going through this large tube
24 to fill the bowl to augment this small volume of water
25 that's coming from the tank.

1 Q So when you read Lines 5 through 7 on page 4 of
2 Exhibit 2007, the use of the word "directly" there
3 doesn't signify a direct connection between the inlet
4 device and the toilet bowl; is that correct?

5 A It says a portion of the water from the inlet
6 device is directly supplied to the toilet bowl to
7 compensate for lack of water in the tank. It's telling
8 you that it's sending the water to the bowl, not to some
9 other part. That's what it says here. That's more
10 specific than what I said to you earlier, which just
11 said "toilet." Here it says the bowl.

12 Q Is it your understanding, then, that the water
13 is going from the inlet device directly into the bowl?

14 A There's further clari -- this is -- this is
15 what I would call an overview description, because it's
16 at the very beginning of the specification. Later in
17 the specification and in the figures more details are
18 given which would augment one's understanding of the
19 water passing through switching device 405 and then
20 directly to the bowl. That's -- that's made clear in
21 the later paragraphs.

22 Q So your testimony is where they use the word
23 "directly" on page 1, Lines 5 through 7, that could mean
24 indirectly via a switching mechanism; is that correct?

25 A No, that's not --

1 MR. MAURER: Objection; form.

2 A No, that's not correct. What I understand from
3 the entirety of the specification is that the water is
4 supplied from the switching device directly to the bowl.
5 That is not made -- that is made clear by the figures
6 and by my overall understanding of how this small-tank
7 toilet works and what's described here. The -- that
8 understanding is, again, based on everything that I see
9 here.

10 Q Would you agree with me that Figure 2 doesn't
11 show the end point of line 403?

12 A Well, I've already answered that. 403 is shown
13 schematically, and one's understanding of where 403 is
14 directed is informed by the specification.

15 Q And when I asked you to point me to the
16 specification that supports that view, you directed me
17 to page 5, Lines 20 through 21, correct?

18 A That is my recollection. I also cite to this
19 section in my declarations. If you want more clarity,
20 we can look at it there, but here I'm pointing directly
21 to this section as informing my understanding where the
22 water supply line 403 is directed.

23 Q And that is the only discussion of water supply
24 line 403 in Guoxin, correct?

25 A My recollection is that that's the primary

1 reference, and I don't see another one that specifically
2 talks about 403, the water supply line.

3 Q And if you look at Figure 2, at the schematic,
4 as you said, of line 403, is it fair to say that it is
5 shown as being horizontal at the point of attachment
6 with switching mechanism 4?

7 A My understanding here is that it is horizontal
8 on the portion that is engaged with the port at the
9 number 4, and then it immediately starts to curve
10 downward. It's under the water here and curves downward
11 initially.

12 Q And then is it showing with a slight bend or
13 change in the curve at the -- towards the -- what is at
14 the end of 403 in Figure 2?

15 A There is a slight bend to a slightly less
16 downward angle, but it's still pointed down towards the
17 bottom of the tank, or presumably towards the bowl, as
18 that's how it's described in the spec.

19 Q And there's a description of the T-shaped nut
20 421 that forms part of the switching mechanism of this
21 reference, correct?

22 A Yes, there's some other spec -- there's some
23 description in the spec on page 5, Lines 32 through 35
24 or 6 -- 36.

25 Q What is the function of the T-shaped nut in

1 this system?

2 A Well, it states here starting at Line 31 on
3 page 5, "Furthermore, the valve stem 42 is equipped with
4 external threads 420, which are combined with a T-shaped
5 nut 421. This T-shaped nut has an appropriate weight,
6 such that when the water level in the water tank
7 decreases, the weight of the nut will automatically
8 lower the switching valve. By simply turning the
9 T-shaped nut, the length of the valve stem can be
10 altered, thus changing the position at which the
11 switching valve's stem is driven by the secondary ball
12 float."

13 Q Am I right to say that adjusting the T-shaped
14 nut by turning it changes the amount of fluid that exits
15 switching mechanism 4 in this reference?

16 MR. MAURER: Objection; foundation.

17 A I haven't characterized it that way and
18 understood it to be that way in my declarations. I see
19 that adjustment as adjusting the timing of when the
20 valve open and closes, so it's just shifting it in the
21 flush cycle forward or backwards in time, but it doesn't
22 change the amount of water that's being delivered or the
23 flow rate. It's just changing the timing of when it
24 occurs.

25 Q If you turn the T-shaped nut to close off the

1 switching mechanism, doesn't that change the amount of
2 fluid that's exiting the switching mechanism?

3 A Again, it's a switching -- water supply
4 switching device. It's essentially turning that flow to
5 the bowl on and off at a particular time in the cycle,
6 and it's driven by the secondary float. So as the water
7 level drops, the valve opens; and as the water level
8 rises, it closes. It may close earlier or later in the
9 cycle depending on how you adjust nut 421.

10 Q If it's closed earlier in the cycle, wouldn't
11 that decrease the amount of water entering the bowl?

12 MR. MAURER: Objection; foundation.

13 A I don't think so, because I think that it opens
14 earlier and closes earlier or it opens later and closes
15 later, but that doesn't change the volume delivered,
16 according to my understanding of this. I haven't
17 thought about that in much detail.

18 I'm looking at it now, and that's my
19 understanding is that, as that secondary float drops,
20 it'll open, and as that secondary float rises, it
21 closes. So its time of opening shifts and its time of
22 closing shifts, but I don't see that as changing the
23 volume delivered. It's hard to know without testing it,
24 I suppose. There's a lot that could go on in the
25 system, but that's my opinion.

1 Q What would be the reason for shifting the
2 timing of the opening and the closing of the switching
3 mechanism?

4 MR. MAURER: Objection; foundation.

5 A Well, this particular configuration of
6 switching valve is implemented to improve the
7 reliability, I believe. We're talking here on page 5 in
8 the specification.

9 It says -- starting at Line 36 through 41, it
10 says, "Additionally, the switching valve and the
11 secondary ball float are set in a separate state,
12 allowing the ascension and descension of the switching
13 valve to be driven by the pushing action of the top
14 surface 300 of the secondary ball float. It also
15 prevents any adverse effects on the switching valve
16 caused by the deviation of the secondary ball float,
17 thereby achieving a truly smooth transition of the
18 switching mechanism."

19 So this invention is directed towards making
20 that smooth transition, and depending on how the ball
21 float is performing, you may need to adjust to
22 compensate for that to improve the switching. That's
23 how I see -- that's what I understand this to be
24 describing.

25 Q The purpose of the invention of this reference

1 is to increase the volume of water delivered to the
2 bowl, correct?

3 MR. MAURER: Objection; foundation.

4 A I think that is described in part. It's
5 designed to deliver and to compensate for the small tank
6 volume by delivering fluid to the bowl, but it also
7 states -- I mean, they're directed at trying to solve
8 problems in the prior art of inconsistent actuation of
9 this valve.

10 So this design is directed towards reliable
11 actuation of this switching device so that that extra
12 water is pushed to the bowl at the right time in the
13 cycle and is done so reliably. That's what I understand
14 that this is directed toward.

15 MS. ACHARAYA: Okay. Let's take a break here
16 again. We've been going for about an hour -- just
17 over an hour. So let's go ahead and take a break.

18 (Recess held.)

19 BY MS. ACHARAYA:

20 Q Let's go ahead and mark Exhibits 2009 and 2010.
21 Mr. Jobin, you have in front of you Exhibits 2009 and
22 2010. Do you recognize these documents?

23 A Yeah, I cite both of these in my declaration,
24 at least in one or two of them. I don't remember which
25 ones. I think it was certainly in the declaration for

1 the '105 patent, for example. But, yes, I recognize
2 them.

3 (Exhibit 2009, Flomatic Valves Flyer, was
4 marked for identification.)

5 (Exhibit 2010, "What is a Flow Restrictor and
6 How Does it Work?", was marked for identification.)

7 Q What is Exhibit 2009?

8 A 2009 is a particular style of flow-control
9 valve. It's called a constant flow-control valve, and
10 it has a flexible orifice inside that helps to maintain
11 a constant flow rate over a range of pressures.

12 Q Did you source this document yourself?

13 A I'm trying to remember if I found this
14 document. I'm certainly aware of this type of fitting.
15 I don't -- I don't remember that I did.

16 Q Who gave this to you?

17 A I think that this would have been provided to
18 me by Tom.

19 Q Is that Danco's counsel?

20 A Yes.

21 Q Okay. What is the date of this document?

22 A I don't see a date on this specific document,
23 but I'm aware of these types of valves going back in
24 time for decades.

25 Q Who's the author of this document?

1 A This is a copy of a specification sheet or
2 marketing document written by a company called Flomatic
3 Valves. It doesn't specify a particular author.

4 Q And are you basing your belief that it comes
5 from Flomatic on the website that's shown on Exhibit --
6 at the bottom of Exhibit 209 (sic)?

7 A It -- in part. Also, in the header of the
8 document, it says "Flomatic Valves," and I'm, again,
9 familiar with this company going back a couple of
10 decades at least.

11 Q Did Mr. Finch tell you where he got this
12 document?

13 A I seem to recall that it was downloaded from
14 their website, but I don't know that -- I can't remember
15 the specifics of when.

16 Q You can set that document to one side.
17 Let's look at Exhibit 2010. What is this
18 document?

19 A This is a printout of a web page from The Lee
20 Company, which is a manufacturer of valves and orifices
21 and flow restrictors of all types. Again, I'm familiar
22 with this company going back three decades to the
23 beginning of my career. They're one of the leaders in
24 this type of component.

25 Q Did you source this document?

1 A I mentioned this company specifically to Tom.
2 I did not download this particular document myself, but
3 I did -- I did mention this company to him is my
4 recollection.

5 Q Did you receive this document from Mr. Finch?

6 A This would have been one of the documents that
7 I received from counsel, yes.

8 Q What other documents did you receive from
9 counsel?

10 A Well, there's a number of documents listed in
11 my report which I relied upon in forming my opinions
12 ranging from documents in the case to documents like
13 this to prior art references. I mean, those types of
14 references are typically and have been in this case
15 provided to me by counsel.

16 Q And what is the date of this document at
17 Exhibit 2010?

18 A Well, this particular print is dated
19 December 3rd, 2024, in the upper left-hand corner of
20 each sheet, but I'm familiar with these components and
21 this company going back three decades. It's been very
22 consistently providing these types of components.

23 Q Is that date that's shown consistent with your
24 understanding of when this document was printed?

25 A That seems about right, shortly after I

1 remember being contacted in this case and talking about
2 it. Yeah, that seems consistent.

3 Q Did you do anything to independently verify
4 that the document Exhibit 2010 was from The Lee Co.
5 website shown -- the URL that's shown at the bottom?

6 A I remember visiting The Lee Co. website
7 initially. I remember going to them to see what else
8 they had to say about this, but my -- I'm citing to this
9 document because it -- it forms the most, sort of,
10 general overview of the types of components that they
11 provide that provide these functions, so that's why I
12 reference this, because this is the foundation of some
13 of my opinions.

14 Q You can set that to one side.

15 Danco told the patent office that the term
16 "bowl fill restriction" is broader than the term "bowl
17 fill valve," correct?

18 A Well, I remember discussing these issues in my
19 report; for example, in my declaration for the '105
20 patent, which is Exhibit 2013. I'm just trying to
21 remember if I cited to what they talked about. Yeah,
22 I'd have to look at the specifics to recall exactly what
23 they represented to the patent office. I don't have it
24 top of mind.

25 Q All right. If you turn to paragraph 272 of

1 Exhibit 2013, does that help to refresh your
2 recollection?

3 A Yes.

4 Q And so based on your review now, is it correct
5 that Danco told the patent office that the term "bowl
6 fill restriction" is broader than the term "bowl fill
7 valve"?

8 A Well, that's what I say here, but I qualify
9 that by saying that it includes both adjustable and
10 static devices. These are described in some detail in
11 the preceding paragraphs and following, but it's my
12 understanding that that is the gist of what they
13 represented to the patent office, yes.

14 MS. ACHARAYA: Let's go ahead and mark Exhibit
15 1008, please.

16 (Exhibit 1008, Issue Notification, was marked
17 for identification.)

18 Q Mr. Jobin, the court reporter's handed you
19 Exhibit 1008. To try and save some trees, we only
20 printed a few excerpts from this exhibit, which is the
21 file history for the '993 patent. If you could turn to
22 page 85 of the exhibit, it's a document entitled
23 "Remarks."

24 Do you see that?

25 A Yes, I do.

1 MR. MAURER: I'll just lodge an objection for
2 the record for the completeness of the document.

3 Q And the second sentence there, the applicant
4 says, and I quote, "For example, independent claim 1 of
5 the present application recites, 'a bowl fill
6 restriction,' which is broader than 'a bowl fill valve,'
7 which is recited in independent claim 1 of Application
8 No. 13/346,355"; do you see that?

9 A I see that sentence, yes.

10 Q Do you agree with me, then, that Danco told the
11 patent office that the term "bowl fill restriction" is
12 broader than a bowl fill valve?

13 A That's what it says here, and that summarizes
14 what we just discussed in the previous question, so yes.

15 Q And what is your understanding of how bowl fill
16 restriction is broader than bowl fill valve?

17 A I previously discussed that. I'll pull up that
18 paragraph again to point to what I stated. In paragraph
19 272 of Exhibit 2013, my '105 declaration, I stated that
20 "the patentee explained that a bowl fill restriction is
21 broader in scope than a bowl fill valve, in that it
22 includes both adjustable and static devices. This is
23 consistent with my understanding of the term."

24 So that sentence talks about the bowl fill
25 restriction including both adjustable and static

1 devices, and I've described various of those in this
2 section of my report -- of my declaration.

3 Q And you have offered an opinion as to the
4 meaning of a bowl fill restriction in this case,
5 correct?

6 A Yes. And what I've stated on page 29 of my
7 '105 declaration, for example, in paragraph 79, I say,
8 "Accordingly, the PTAB should construe" -- and this is
9 quoting the patent owner's arguments, I should say.
10 "The PTAB should construe 'bowl fill restriction' to
11 mean 'a device for regulating a flow rate of an amount
12 of water flowing therethrough.'"

13 So this is -- this is what I'm using to -- as
14 sort of putting color on the term "bowl fill
15 restriction," which is a term that has not been
16 construed by -- by the board in this case but is
17 afforded its plain and ordinary meaning, but I'm citing
18 this to help to add color to how I understand the term.

19 Q And you were careful there in your answer to
20 note that that was the patent owner's proposal.

21 Do you agree with that proposed construction?

22 A Yes, I do. It's right in alignment with how I
23 understand the term to mean, based on what I've read and
24 based on what I understand.

25 Q You didn't consult any dictionaries or

1 treatises to determine the ordinary meaning of bowl fill
2 restriction, correct?

3 MR. MAURER: Objection; form.

4 A No. As a person of ordinary skill of the art,
5 I understand that term, and I understand that a person
6 of ordinary skill at the time would have understood that
7 term based on the existing technology and art in the
8 field, based on how toilets work.

9 And if you look at the Brown prior art
10 reference dating back many decades, it talks about a
11 fixed restriction or an adjustable restriction to adjust
12 the flow rate. It's something that one of ordinary
13 skill would have understood.

14 Q And when Danco filed and prosecuted the '993
15 patent, they replaced "bowl fill restriction" with
16 "water flow regulator," correct?

17 A It's my understanding that the '993
18 specification and patent claims use the term "water flow
19 regulator," yes.

20 Q And Danco in this -- in these proceedings has
21 said there's no difference between bowl fill restriction
22 and water flow regulator in terms of how those should be
23 construed, correct?

24 A It's my recollection and from the '993 that the
25 same description or color was added to understand those

1 two terms in the same way, yes.

2 Q And so is it your opinion, consistent with what
3 patent owner has proposed, that the term "water flow
4 regulator" should be construed as, quote, a device for
5 regulating a flow rate of an amount of water flowing
6 therethrough, the same as the bowl fill restriction
7 construction?

8 A I'm not sure I understand your question. Could
9 you repeat it?

10 Q Of course, yeah. And I apologize. It was
11 badly worded. You'll agree with me that Danco says
12 "bowl fill restriction" and "water flow regulator"
13 should be construed the same way in these patents?

14 A A patent owner has put forth a definition or a
15 proposed understanding in both the '993 and the '105
16 patents that has the same words, and so I take from that
17 that they understand those terms to have the same or
18 congruent meanings.

19 Q Okay. And you testified that you agree with
20 their construction as it relates to the -- how bowl fill
21 restriction should be construed, correct?

22 A I did state that, yes.

23 Q And so my question is: Do you also agree that
24 that is how the term "water flow regulator" should be
25 construed?

1 A Yes, I agreed with the patent owner position in
2 this '993 matter as well.

3 Q Did you consult any dictionaries or treatises
4 for the ordinary meaning of "water flow regulator"?

5 A Well, I read the specification for the three
6 patents in particular, and as a person of ordinary skill
7 in the art at the time would have understood water flow
8 regulator in this context, the meaning of that would
9 have been clear to them. I understand it now, and I
10 would have understood it then is what I'm saying.

11 Q But you didn't consult any dictionaries or
12 treatises -- beyond the specification of the patents,
13 you didn't consult any dictionaries or treatises for the
14 ordinary meaning of "water flow regulator," correct?

15 MR. MAURER: Objection; form; asked and
16 answered.

17 A No. It's a simple concept. It's not something
18 that I needed to refer to an outside source.

19 Q And for -- if we focus on the construction of
20 the bowl fill restriction tab, because we have the
21 declaration 2013 in front of us, you said you agreed
22 with patent owner; it should be construed as a device
23 for regulating a flow rate of an amount of water flowing
24 therethrough.

25 Have you separately defined for the board what

1 flow rate means?

2 A I have not put forth any definition for the
3 term "flow rate" to the board, no.

4 Q And what does flow rate mean to you?

5 A It's a simple engineering concept that a rate
6 would indicate a volume per unit time.

7 Q Is that a mathematical relationship that you're
8 describing?

9 A It's a -- it's a concept that helps us to
10 understand fluidics. Here, for example, you could
11 measure a certain number of milliliters per minute to
12 determine how much -- what volume of water will flow
13 through that system per unit time, so you could use
14 whatever units are appropriate for the flow rate, but in
15 this case it's -- volume per unit time is how one would
16 understand the term "flow rate."

17 Q And do you -- can you -- in that system, do you
18 measure the volume of the water passing through at the
19 source to see how much water enters the system?

20 A Provided there are no losses in the system, you
21 can measure either at the beginning or at the end. The
22 same volume will pass through in that time. If there's
23 leaks, that's a different matter, but generally
24 speaking, you could measure it either at the input or
25 the output of the flow-control device.

1 Q And we spoke a little bit today about the term
2 "integrally molded," and I know that you've testified
3 about the use of that in the claims of these patents.

4 Did you consult any dictionaries or treatises
5 for the meaning of the term "integrally molded"?

6 A Well, somewhere in my declarations I've listed
7 the documents that I've referred to. I'd have to find
8 that. I assume it's in the appendix, but I don't see it
9 here.

10 My recollection is that the term "integrally
11 molded with" was discussed in the institution decision
12 based on information that was provided to the board by
13 both parties and that the board provided and construed
14 this term in that institution decision, so I'm guided by
15 what the board has put forth.

16 Q And if you look at paragraph 77 of your
17 declaration, Exhibit 2013 --

18 A Paragraph 77?

19 Q 77, yeah.

20 A Yes, I see it.

21 Q You noted there that the board construed
22 "integrally molded with" to mean, quote, molded together
23 as a single structure, correct?

24 A Yes, I state in the beginning of paragraph 77,
25 "I understand that the board construed 'integrally

1 molded with' to mean 'molded together as a single
2 structure.'" And that's citing to the institution
3 decision.

4 Q The board didn't refer to plastic or any other
5 material in their construction, correct?

6 A Well, I've cited pretty extensively to the --
7 to some of the arguments and to some of the board's
8 analysis. I don't recall the board saying the word
9 "plastic" in particular, but "integrally molded with"
10 means injection molding, for example, of plastic.

11 That is something that I understand, and it's
12 something that Dr. Cameron agreed with as well when she
13 talked about the differences between molding and, say,
14 casting or the machining; different processes. Here
15 molding means -- it means plastic materials, though that
16 word is not used by the board here.

17 Q The board didn't say that "integrally molded
18 with" means injection molding, correct?

19 A There's different types of molding of plastic
20 materials. You could make an integrally molded
21 pressure-formed or thermal-formed part, but injection
22 molding would be the first thing that a person of
23 ordinary skill would understand in seeing the term
24 "integrally molded with."

25 Q But that's not what the board's construction

1 is, right? You've got the board's construction there at
2 paragraph 77. The board construed "integrally molded
3 with" to mean molded together as a single structure,
4 correct?

5 A Right. They're basically using different words
6 to describe this term and to state that it's molded
7 together as a single structure rather than assembled
8 from separately molded parts and put together. They're
9 trying to distinguish those two, but they understand
10 that they're molded together as a single structure when
11 defining this claim term.

12 Q Right. But they didn't say "molded together as
13 a single plastic structure"?

14 A I'm giving you what I understand the term
15 "integrally molded with" to mean in the context of the
16 board's claim construction and also in the context of
17 what one of ordinary skill understands about molding in
18 that it means in this -- specifically in this context
19 it's definitely talking about molding a plastic
20 structure as one piece rather than separately creating
21 parts and putting them together.

22 MS. ACHARAYA: Why don't we go ahead and take a
23 break for lunch. Let's go off the record.

24 (Recess held.)

25 MS. ACHARAYA: All right. We're back on the

1 record.

2 BY MS. ACHARAYA:

3 Q Mr. Jobin, during the various breaks that we've
4 taken today, did you discuss the substance of your
5 testimony with counsel?

6 A No. We've been discussing fishing and weather
7 and all kinds of stuff, but, no, not any substance.

8 Q Okay. I'll have you turn to Exhibit 1022,
9 which was the Ho reference. And if you recall, you were
10 marking, I believe it was, Figure 1 for us to show the
11 point of attachment.

12 Do you recall that testimony earlier?

13 A Yes.

14 Q And you testified that this is where, quote,
15 the tube is attached to a piece of plastic that's coming
16 out of the diverter valve, correct?

17 A That was my recollection, yes.

18 Q Okay. All right. I just wanted to confirm
19 that I heard that correctly.

20 Let's turn to Exhibit 2007, which is the Guoxin
21 reference. I think you did a better job of pronouncing
22 it than I did.

23 A I'm not sure it was correct, but I'll -- I just
24 call it Guoxin.

25 Q Guoxin, thank you.

1 A Thinking back to my previous answer, you used
2 the term "plastic" that I don't recall using. I don't
3 recall attaching to 402 -- not 402, but in Ho I recall
4 attaching to the diverter valve -- or to the projection
5 from it. I'd have to go back to my testimony, but I
6 don't recall saying it was plastic. I just want to be
7 clear. I don't recall that specific wording.

8 Q Okay. And if you did use the word "plastic"?

9 A If I did, I did. I just don't recall at this
10 time whether my previous testimony used that term.

11 Q Okay. Looking at it now, is the tube attached
12 to a piece of plastic that's coming out of the diverter
13 valve in Figure 1?

14 A Well, it's attached to a port on the diverter
15 valve. I didn't -- I haven't analyzed the material to
16 the extent that I'd be able to say definitively what
17 material it is.

18 Q Does Ho describe what materials are used in the
19 structures disclosed in Ho?

20 MR. MAURER: Objection; foundation.

21 A I don't recall ever testifying that it did.
22 I'd have to review it again to be sure, but I don't
23 think so.

24 Q Okay. All right. So let's go ahead and turn
25 to Exhibit 2007. And if you look at Figure 3, do you

1 recall that Dr. Cameron testified that there is an
2 extended portion shown in Figures 3 and 4 of this
3 reference?

4 MR. MAURER: Objection to the extent it
5 mischaracterizes her testimony.

6 A I recall Dr. Cameron pointing to Figure 3, but
7 I don't recall the specifics of her testimony at this
8 time.

9 Q If you could go to your declaration that we've
10 been looking at today, Exhibit 2013, paragraph 102, and
11 let me know when you're there. So 102 starts on page 38
12 and goes across to page 39, and I believe on page 39 you
13 reproduced the annotated figure from Dr. Cameron's
14 declaration, is that correct, there on the left?

15 A Yeah, that's Dr. Cameron's annotated figure on
16 the left on page 39.

17 Q And do you see there she has circled a portion
18 of Figure 3 and a portion of Figure 4 and labeled it
19 "extended portion integrally molded with the body - bowl
20 fill outlet port"? Do you see that annotation?

21 A I see that annotation, yes.

22 Q Okay. You disagree with Dr. Cameron that this
23 is an integrally molded extended portion shown in
24 Figures 3 and 4, correct?

25 A Well, what I see when I look at Guoxin and

1 Figure 3 in particular here is that not enough
2 information is given to be able to make that
3 determination.

4 Q Not enough information is given to make the
5 determination that that piece is integrally molded with
6 the body of the toilet bowl valve; is that what you
7 mean?

8 A Well, what we see in Figure 3 is a side view of
9 the assembly with some partial sections in the area of
10 the switching valve and the secondary float but not in
11 the area of the extended portion -- or as identified
12 extended portion and the fill valve.

13 So without additional information, either that
14 section view or written specification that informs the
15 reader, I don't see a way to tell whether that's
16 integrally molded or not.

17 Q Could I have you mark on Exhibit 2007 what you
18 are referring to when you say the "extended portion"
19 there?

20 A Well, in the context of what we were just
21 discussing, we're talking about the extended portion,
22 which is extending radially from the fill valve -- I'm
23 not sure which word they're using in Guoxin, but what I
24 understand to be the fill valve in this art -- in this
25 reference -- "water inlet device" it's called.

1 There is a protrusion, and in Figure 4 you can
2 ascertain that the water supply switching device is
3 pressed or -- not inserted but, rather, un-serted or
4 slid over that projection. And that's clear because you
5 can see, due to the section view in Figure 4, that the
6 port 401 is surrounding that extended portion.

7 Q Yeah. Could you circle or hatch or use some
8 kind of annotation to show the protrusion or the
9 extended portion that you referred to in that answer?

10 A I can. I just wanted to make sure that I'm
11 understanding the scope of that term, "extended
12 portion." It's not construed by the board. It's just
13 ordinary meaning, so when I read the specification in
14 the patents in suit, I understand the extended portion
15 of the patents to be what's labeled as such in the
16 figures.

17 For example, Figure 1 of the '105 patent calls
18 out -- give me a moment. Yeah, just clarifying that the
19 use of the term "extended portion" in the context of is
20 an integrally-molded-with-the-body feature.

21 So to the extent that identifying the extended
22 portion implies that it's integrally molded, I don't
23 agree to that, but what I note is a somewhat comparable
24 feature -- it's different because it's designed to
25 insert into the valve port rather than the other way

1 around, but there is a projecting extended portion
2 coming from the body, which is highlighted in blue here.

3 And I'm going to call that "extended portion
4 but not known if integrally molded with." Okay. So
5 I've highlighted that on page 8, Figure 4 of the Guoxin
6 reference exhibit -- no. Oh, gosh. Now I've done it --
7 Exhibit 2007.

8 Q Okay. So if I'm understanding correctly, just
9 accepting the term "extended portion" -- and I asked and
10 you disagree that -- whether what you circled there in
11 Exhibit 2007 is, in fact, an extended portion, but you
12 also disagree that it's integrally molded with the body
13 of the fill valve, correct, in Guoxin?

14 A In Guoxin, what I have stated as an opinion is
15 that this feature is not integrally molded because one
16 cannot determine whether it is or not. That's
17 essentially what I'm saying. It's been identified as
18 such by Dr. Cameron, but I disagree with that analysis.

19 Q Is the portion that you've circled shown in
20 Figure 4 of Guoxin?

21 A I circled --

22 Q Excuse me, Figure 5 of Guoxin.

23 A No.

24 Q If the figure that you've circled, or the
25 structure that you've circled, was a separate structure

1 from the body of the toilet fill valve, what kind of
2 connection would you expect between that -- let's call
3 it a protrusion and the body of the toilet fill valve?

4 MR. MAURER: Objection; foundation; scope.

5 A I've not provided any opinions on how it might
6 be connected. It's hypothetical. It's not described in
7 Guoxin. It depends on the materials, if it's a machined
8 part or if it's a cast part that's post machined or if
9 it's a part that is brazed in place.

10 A part could be welded in place, glued in
11 place. Lots of different attachment means could be
12 used, and you would have the same outward appearance as
13 what's shown in Guoxin.

14 Q Why not directly connect the switching
15 mechanism to the toilet fill valve in the Guoxin figure?

16 MR. MAURER: Objection; foundation; scope.

17 A What do you mean when you say "why not directly
18 connect"? What does that mean?

19 Q Yeah, so if I understand your testimony
20 correctly, the protrusion on the body of the toilet fill
21 valve in Guoxin is not integrally molded with the body.
22 And we know from the board that the board has construed
23 integrally molded to mean as part of a single structure.

24 A That it's molded as part of a single structure
25 together.

1 Q Correct.

2 A Not separate parts that are then assembled.

3 Q Correct. So if the extended portion is not
4 molded together with the body of the fill valve as a
5 single structure, my question is, what is the purpose of
6 that extended portion or protrusion in Guoxin?

7 MR. MAURER: Objection; foundation; scope.

8 A Well, the purpose of it is to serve as an
9 attachment point for the valve. It has some features
10 which indicate that those two are pushed together. I
11 would say that it's akin to or similar to a hose barb in
12 the way that it's formed, so those are -- you know, that
13 type of fitting is often supplied as a component, which
14 is assembled to a larger body, for example.

15 Q Why not just screw the switching mechanism 4
16 into the body of the toilet fill valve directly?

17 MR. MAURER: Objection; foundation; scope.

18 A Well, I don't have information in Guoxin which
19 would provide an answer to that. What I'm saying is
20 that what I'm presented with here in front of me in
21 Guoxin doesn't provide me with enough information to
22 determine the answer to that question.

23 Q All right. Let's turn to the '993 patent,
24 please. And I'll direct you to Column 4 of that patent.
25 We looked at the corresponding disclosure on the '105

1 patent earlier today.

2 A Column 4?

3 Q Yeah, line -- it starts at Line 2. "In this
4 respect no pressure is seen within the tube 146"; do you
5 see that?

6 A I see that.

7 Q Okay. What is being described in terms of the
8 pressure head in this paragraph of the '993 patent?

9 A So we're in the detailed description where it's
10 describing the benefits of the invention here, and it
11 says specifically, "The fact that the bowl fill valve
12 109 is integral with the toilet fill valve 100 prevents
13 the creation of a pressure head in the tube 146, as
14 would be the case if the bowl fill valve 109 were
15 included in the middle of the tube 146."

16 So by moving it adjacent to the body, you
17 prevent that high-pressure -- they call it a pressure
18 head -- situation from occurring within the tubing.

19 Q So the bowl fill valve 109 there is connected
20 to the tube 146 -- to one end of the tube 146, correct,
21 rather than being in the middle of it?

22 A It is -- what it's stating in the prior art is
23 that such an adjustment or flow restriction would be in
24 the middle of tube 146. This improvement puts it to the
25 end of that tube adjacent to and integrally formed, or

1 integrally molded with the body of the fill valve to
2 prevent that pressure situation in the tubing.

3 Q Is the bowl fill valve directly connected to
4 the tube 146 there?

5 A I'm looking at the description for Figure 3,
6 for example. It says -- in Lines 45 and onward, it
7 says, "Water exits the bowl fill valve outlet 116." So
8 you've got the -- you've got 109, which was previously
9 described as the bowl fill valve, which is nuclear
10 formed or integrally molded with the main valve. And it
11 has a feature 116, which is called the "bowl fill valve
12 outlet," and that connects to the tubing.

13 Q How does that prevent the creation of a
14 pressure head?

15 A As I described earlier today, the restriction
16 in the -- that is imposed by the valve in this case, in
17 this particular embodiment, and in this patent holds
18 back the pressure. It allows water to go through, but
19 there's a pressure drop as the water goes through the
20 restriction or through the valve.

21 That pressure drop in this case is substantial
22 is what they're saying, so much so that it -- quote, the
23 toilet fill valve 100 -- because the bowl fill valve 109
24 is integral with the toilet fill valve prevents the
25 creation of a pressure head in the tube.

1 So what that means is is that the flow rate is
2 low enough relative to the diameter of the tube that it
3 doesn't develop any pressure inside that tube.

4 Q So moving the bowl fill valve 109, the
5 restrictor from the middle of tube 146 and instead
6 having it at the end prevents the creation of a pressure
7 head; is that correct?

8 A Well, it's at the -- it's at the entry to the
9 tube, not the exit to the tube, so --

10 Q Correct.

11 A -- yes, you're at the -- at the proximal end of
12 the tube, which is where it's connected to the valve.
13 The pressure drop occurs inside the valve as the fluid
14 flows through the restrictions in the valve and exits
15 port 116 at substantially low or no pressure because
16 there's no back pressure imposed by the tubing in this
17 case, because the flow rate is low enough.

18 Q And so if you have, you know, a water flow
19 restrictor more generally, if you moved it from being in
20 the middle of the tube 146 to the proximal end of the
21 tube, would you expect to see that prevention of a
22 pressure head forming within tube 146?

23 A Well, it's a hypothetical situation, and it
24 depends on the nature of the restriction and how much
25 pressure is on the supply side. If it's a very high

1 pressure and a relatively open restriction, then no.

2 In this case, the restriction is enough to meet
3 or to provide substantially -- what'd they call it? A
4 pressure head is not created in any portion of the tube
5 by nature of this design. So in a hypothetical
6 situation it's difficult to say, but here they're saying
7 that the restriction is eliminating the pressure head
8 that would otherwise occur in the tube.

9 Q Okay. And so I'm just -- in the case of a
10 toilet system with a flow restrictor, we saw in the
11 prior art where flow restrictors were placed in the
12 middle of the tube that leads to the overflow tube. In
13 the case of the '993 patent, that restriction is moved
14 to the proximal end of that first tube, 146, and is
15 connected to tube 146.

16 So is the movement of that restrictor out from
17 the middle of tube 146 to instead have a connection at
18 the proximal end of the tube 146 -- based on what you
19 see in this patent and your experience, is that what's
20 creating the prevention of a pressure head in that
21 system?

22 MR. MAURER: Objection; form; foundation.

23 A I think I've answered this in different ways.
24 I'll try to be more clear, but I'm citing directly to
25 the specification in the '993 patent. And here it's

1 describing how, by attaching the bowl fill valve
2 directly and integrally molding it with the body of the
3 main valve, the toilet valve, that addresses the problem
4 that would otherwise be occurring, and that is the
5 creation of a pressure head in any portion of the tubing
6 146.

7 They're changing the configuration to prevent
8 that situation, and they give a reason why. They said
9 that the fact that pressure head is not created in any
10 portion of the tube 146 prevents the tube 146 from
11 working its way off of the bowl fill valve outlet 116
12 over time.

13 Of course, that would be a situation where the
14 toilet wouldn't be functional, so by changing the design
15 in this way and inventing this new approach, they've
16 solved that problem. The tubing, when it's exposed to
17 high pressures, could pop off of that fitting.

18 Q If you turn to Claim 7 of the '993 patent,
19 which I think is on the next page or maybe a couple of
20 pages --

21 A Claim 7?

22 Q Claim 7. It's a dependent claim, and it reads,
23 "The system of Claim 1 wherein the water flow regulator
24 prevents a pressure head from being formed in the tube";
25 do you see that?

1 A I see that claim, yes.

2 Q What is your understanding of how the water
3 flow regulator prevents the pressure head from being
4 formed in the tube as claimed in Claim 7?

5 A Well, earlier I talked about this hypothetical
6 situation in which you couldn't say for sure how much
7 pressure would be in the tube after a restriction,
8 because you don't have the pressure, flow rate, size of
9 the tubes, or any other data to provide that.

10 But what you can do is design the water flow
11 regulator appropriately so that substantially no or no
12 pressure head is formed in the tube, if it's sized
13 correctly. And that's what they're showing here is that
14 you can reduce the pressure in the tube or you can
15 eliminate the pressure in the tube based on how you
16 would -- how you design the water flow regulator.

17 Q And how is that claimed here?

18 A It's just saying that wherein the water flow
19 regulator prevents a pressure head -- and that's
20 disclosed in the specification. It talks about how it
21 does that.

22 Q Where in the specification?

23 A Well, we've just talked about that I think back
24 in that section that we were previously reviewing. By
25 taking the location of this from the middle of the tube

1 to the beginning of the tube and designing it
2 appropriately, sizing the tube and adjusting the valve
3 appropriately, then you have the supply pressure reduced
4 in the valve so that it doesn't appear in the tubing.
5 That's the point of the invention.

6 Q And is that the same understanding that you
7 have with respect to Claim 9, which is another dependent
8 claim, claiming the method of Claim 8 wherein the water
9 flow regulator prevents a pressure head from being
10 formed in the tube?

11 A This is a method claim that describes the how
12 of what I've described just previously in my previous
13 answer; "Wherein the water flow regulator prevents a
14 pressure head from being formed in the tube." And so
15 it's dependent on the features claimed in Claim 8, and
16 it further claims this limitation, which is preventing
17 the pressure head in the tube.

18 Q You didn't offer any opinions in response to
19 Dr. Cameron or the petition with respect to Claims 7 and
20 9 of the '993 patent, correct?

21 MR. MAURER: Objection; form.

22 A I don't recall. I'd have to review my
23 declaration, but I don't recall responding to her
24 opinions on Claims 7 and 9. I'd have to -- I'd have to
25 double check about that. I don't recall that.

1 Q Okay. Have you heard of the American Society
2 of Sanitary Engineers, or ASSE?

3 A Yes.

4 Q What do you know about the ASSE?

5 A Well, I've heard of them. I don't know much
6 about them. In the context of this case and the word
7 "sanitary," I assume it has to do with plumbing fittings
8 related to household plumbing, for example.

9 Q Are you aware that the society publishes a
10 plumbing dictionary?

11 A I was not aware of that, no.

12 Q I think I know the answer to the next question.
13 I'll ask it anyway.

14 Did you review the excerpts from that plumbing
15 dictionary that were attached to Dr. Cameron's
16 declaration?

17 A Well, I certainly read Dr. Cameron's
18 declaration from front to back. I'd have to refresh my
19 recollection of those citations.

20 MS. ACHARAYA: Let's go ahead and mark as --
21 let's go off the record.

22 (Discussion off the record.)

23 BY MS. ACHARAYA:

24 Q Mr. Jobin, I have marked and put in front of
25 you what will be Exhibit 15 to your deposition, and I

1 will represent that this is a true and correct copy of
2 an excerpt from the ASSE plumbing dictionary that we
3 were just discussing, the sixth edition, and you can see
4 on the third page that it's got a copyright there of
5 2007.

6 Do you see that?

7 A I see that, yes.

8 (Exhibit 15, ASSE International Plumbing
9 Dictionary Excerpt, was marked for identification.)

10 Q And if you turn to what is marked as page 98
11 there at the bottom --

12 A Got it.

13 Q -- you'll see the second defined term there is
14 "mold." Do you see that?

15 A I see the term "mold," yes.

16 Q And the first definition given there is "A
17 cavity for casting materials such as metal or plastic in
18 the heating or fluid state"; do you see that?

19 A I see that.

20 MR. MAURER: I'd just object for the record as
21 to the completion -- completeness of the exhibit.

22 Q You testified earlier that the use of the word
23 "molded" by the board indicated to you that the
24 structures discussed in the patents in suit must be
25 injection molded, molded from plastic, correct?

1 A I don't think that's an accurate reflection of
2 my answers. What I've stated was that -- we'll have to
3 go back to the record, but what I stated was that
4 molding processes are different from casting processes
5 and that molding plastic materials by a variety of
6 techniques is what one of ordinary skill in the art
7 understands when you're talking about "integrally molded
8 with." That's what I remember talking about.

9 Q So your testimony earlier was that one of
10 ordinary skill in the art would understand "integrally
11 molded with" to refer to molding of plastic structures;
12 is that correct?

13 MR. MAURER: Objection; mischaracterizes his
14 prior testimony.

15 A That is how I understand and how one of
16 ordinary skill understands the term "integrally molded
17 with" at the time of the invention talking about
18 molding. And Dr. Cameron agreed that molding and
19 casting are different processes. That's -- that's how I
20 see that particular term. That's how I understand it.

21 Q But that's not how the board construed the term
22 in these proceedings, correct?

23 A Well, we talked about the board's definition of
24 the term and their construction of the term, which I
25 agree with, and I -- my understanding is informed by the

1 board, and I'm using that in applying it to my analysis
2 in this case.

3 Q And in applying the Court's construction to
4 your analysis, your opinion is that "molded together as
5 a single structure" refers to molding of plastic
6 structures; is that correct?

7 A That is -- that understanding is, again, based
8 on the entirety of what I've reviewed, and molding
9 plastics is exactly what one understands when they see
10 that term, yes.

11 Q Now that you've reviewed what the American
12 Society of Sanitary Engineers considers to be the
13 meaning of mold, do you still hold that opinion?

14 A Well, they're using the term in two ways
15 here -- well, three ways. They're talking about a
16 cavity for casting material. That's a -- a mold is a --
17 usually a machined metal structure into which one
18 injects material, but the molding process is different
19 from the noun mold.

20 In Item 2, it talks about forming a malleable
21 material by pressing into a cavity. That is more akin
22 to a stamping process or a pressure-forming or
23 thermal-forming process according to what I'm reading
24 here. That doesn't really apply to the types of
25 geometry that I'm evaluating in these prior-art

1 references and in the -- and the patents in suit.

2 Q Just to be clear, though, the definition says
3 that it's a cavity for casting material such as metal or
4 plastic.

5 A Well, I don't have other context from this
6 document. I have not reviewed the entire document. I'm
7 looking at one specific definition here, which is
8 talking about things like fungus as well. I mean, it's
9 a pretty general term. I don't think that in the
10 context of this specification in the patents in suit
11 that it has this particular meaning. I feel that the
12 meaning is as I've described it to you earlier.

13 MS. ACHARAYA: Okay. I have no further
14 questions for you, Mr. Jobin. Thank you very much
15 for your time.

16 MR. MAURER: Can we take a couple of minutes to
17 make sure I don't have anything?

18 (Recess held.)

19 CROSS-EXAMINATION

20 BY MR. MAURER:

21 Q Mr. Jobin, I just have one issue to clear up.
22 Could you please look at Exhibit 2013, which is your
23 declaration on the '105 patent in the case.

24 A Sure.

25 Q It was the second exhibit that was introduced

1 today.

2 A Okay.

3 Q Do you recall being asked at the beginning of
4 the deposition about when you worked on your declaration
5 and submitted your final declaration -- actually,
6 declarations, three of them, in these IPR matters?

7 A I remember discussing that early today, yes.

8 Q Okay. Could you look at the last page of
9 Exhibit 2013?

10 A Okay.

11 Q Do you see a date on the last page?

12 A It says December 4th, 2024.

13 Q And is that your signature page on the
14 declaration as to the '105 patent?

15 A This is my signature, yes.

16 Q Does seeing the date December 4th, 2024, on the
17 signature page of Exhibit 2013 refresh your recollection
18 as to when you performed your work and submitted your
19 three declarations in these three IPR matters?

20 A Yes. It's a bit earlier than I think I
21 recalled in my earlier testimony. It's in December
22 rather than earlier this year.

23 MR. MAURER: Okay. I have nothing else.

24 MS. ACHARAYA: Nothing else. Thank you very
25 much for your time today.

1 THE WITNESS: Thank you.

2 (Discussion off the record.)

3 COURT REPORTER: Do you want to read or waive?

4 MR. MAURER: Yes, please.

5 COURT REPORTER: Read?

6 MR. MAURER: Yes, please.

7 COURT REPORTER: And do you want this typed?

8 MS. ACHARAYA: Yes. So I would like to request
9 a rough. And how quickly can we get the final?

10 COURT REPORTER: When do you need it?

11 MS. ACHARAYA: We have a deadline of a week
12 from tomorrow to submit to the --

13 COURT REPORTER: So you need it Friday?

14 MS. ACHARAYA: Friday would be wonderful.
15 Thank you.

16 COURT REPORTER: And do you want a copy?

17 MR. MAURER: Yes, please.

18 (Whereupon, the taking of the deposition
19 concluded at 1:32 p.m.)
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25

CERTIFICATE OF OATH

STATE OF FLORIDA)

COUNTY OF COLLIER)

I, Karen White, Registered Professional
Reporter, Notary Public, State of Florida, do hereby
certify that MICHAEL JOBIN personally appeared before me
and produced a Driver's license for identification on
March 11, 2025, and was duly sworn.

Signed this 14th day of March 2025.

Karen White

Karen White, RPR, CRR

Notary Public

State of Florida

My Commission No. HH 337876

Expires: January 1, 2027

CERTIFICATE OF REPORTER

STATE OF FLORIDA)

COUNTY OF COLLIER)

I, Karen White, Registered Professional Reporter, do hereby certify that I was authorized to and did stenographically report the deposition of MICHAEL JOBIN, that a review of the transcript was requested, and that the foregoing transcript is a true record of my stenographic notes.

I FURTHER CERTIFY that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED this 14th day of March 2025, at Naples, Collier County, Florida.



Karen White, RPR, CRR

1 E R R A T A S H E E T

2 FLUIDMASTER VS. DANCO

3 DO NOT WRITE ON TRANSCRIPT -- ENTER CHANGES HERE

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19 Under penalties of perjury, I declare that I have
 20 read the foregoing deposition held March 11, 2025, and
 21 that it is true and correct subject to any changes in
 form or substance entered here.

21

22 _____
 MICHAEL JOBIN DATE

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Magna Key Contacts



Schedule a Deposition:

Scheduling@MagnaLS.com | 866-624-6221

Order a Transcript:

CustomerService@MagnaLS.com | 866-624-6221

General Billing Inquiries:

ARTeam@MagnaLS.com | 866-624-6221

Scheduling Operations Manager:

Patricia Gondor (E: PGondor@MagnaLS.com | C: 215-221-9566)

Customer Care:

Cari Hartley (E: CHartley@MagnaLS.com | C: 843-814-0841)

Director of Production Services:

Ron Hickman (E: RHickman@MagnaLS.com | C: 215-982-0810)

National Director of Discovery Support Services:

Carmella Mazza (E: CMazza@MagnaLS.com | C: 856-495-1920)

Billing Manager:

Maria Capetola (E: MCapetola@MagnaLS.com | C: 215-292-9603)

Director of Sales Operations:

Kristina Moukina (E: KMoukina@MagnaLS.com | C: 215-796-5028)

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