

UNITED STATES INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	Investigation No.
CERTAIN OUTDOOR AND SEMI-OUTDOOR	)	337-TA-1331
ELECTRONIC DISPLAYS, PRODUCTS	)	
CONTAINING SAME, AND COMPONENTS	)	
THEREOF	)	

OPEN SESSIONS

Pages: 1 through 273 (with excerpts)
Place: Washington, D.C.
Date: June 26, 2023

HERITAGE REPORTING CORPORATION

Official Reporters
1220 L Street, N.W., Suite 206
Washington, D.C. 20005
(202) 628-4888
contracts@hrccourtreporters.com

1 UNITED STATES INTERNATIONAL TRADE COMMISSION
2 Washington, D.C.
3 BEFORE THE HONORABLE MONICA BHATTACHARYYA
4 Administrative Law Judge

5 _____
6 In the Matter of:) Investigation No.
7 CERTAIN OUTDOOR AND SEMI-OUTDOOR) 337-TA-1331
8 ELECTRONIC DISPLAYS, PRODUCTS)
9 CONTAINING SAME, AND COMPONENTS)
10 THEREOF)

11 _____
12
13 International Trade Commission
14 500 E Street, S.W.
15 Washington, D.C.

16
17 Monday, June 26, 2023

18
19 EVIDENTIARY HEARING, VOLUME I

20
21 The Hearing commenced remotely, pursuant to the
22 notice of the Judge, at 9:30 a.m. Eastern.

23

24

25 Reported by: Karen Brynteson, FAPR, RMR, CRR

Heritage Reporting Corporation
(202) 628-4888

1 APPEARANCES:

2

3 For Complainant Manufacturing Resources International,
4 Inc.:

5 AARTI SHAH, ESQ.

6 Kilpatrick Townsend & Stockton LLP

7 1420 Fifth Avenue, Suite 3700

8 Washington, D.C. 20005

9 202-508-5800

10

11 DARIO A. MACHLEIDT, ESQ.

12 KATHLEEN R. GEYER, ESQ.

13 Kilpatrick Townsend & Stockton LLP

14 1420 Fifth Avenue, Suite 3700

15 Seattle, WA 98101

16

17 RUSSELL A. KORN, ESQ.

18 DAVID A. REED, ESQ.

19 MITCHELL G. STOCKWELL, ESQ.

20 Kilpatrick Townsend & Stockton LLP

21 1100 Peachtree Street NE, Suite 2800

22 Atlanta, GA 30309

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 APPEARANCES: (CONTINUED)

2

3 For Complainant (Continued):

4 CRAIG D. CANNON, ESQ.

5 ALTON L. ABSHER, III, ESQ.

6 ANDREA A. ANDERSON, ESQ.

7 JONATHAN E. HARRIS, ESQ.

8 Kilpatrick Townsend & Stockton LLP

9 1001 West Fourth Street

10 Winston-Salem, NC 27101

11

12 MATTHEW J. MEYER, ESQ.

13 Kilpatrick Townsend & Stockton LLP

14 1080 Marsh Road

15 Menlo Park, CA 94025

16

17

18

19

20

21

22

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 APPEARANCES (Continued):

2 For Respondents Samsung Electronics Co., Ltd., Samsung
3 Electronics America, Inc., Samsung SDS Co. Ltd., and
4 Samsung SDS America, Inc.; Coates Signco Pty Limited and
5 Coates US Inc.; and Industrial Enclosures Corporation d/b/a
6 Palmer Digital Group:

7 PATRICK J. MCCARTHY, ESQ.

8 ANNAKA NAVA, ESQ.

9 JACQUELINE GENOVESE BOVA, ESQ.

10 JEREMY JONES, ESQ.

11 Goodwin Procter LLP

12 1900 N Street, N.W.

13 Washington, D.C. 20036

14

15 DARRYL M. WOO, ESQ.

16 Goodwin Procter LLP

17 Three Embarcadero Center

18 San Francisco, CA 94111

19

20 JESSE CHENG, ESQ.

21 ELIZABETH J. LOW, ESQ.

22 YOONA LEE, ESQ.

23 Goodwin Procter LLP

24 601 Marshall Street

25 Redwood City, CA 94063

Heritage Reporting Corporation
(202) 628-4888

1 APPEARANCES (Continued):

2 For Respondents (continued):

3 DOUGLAS J. KLINE, ESQ.

4 SRIKANTH K. REDDY, ESQ.

5 CHRISTIE L. LAROCHELLE, ESQ.

6 HARRISON GUNN, ESQ.

7 KARA GROGAN, ESQ.

8 Goodwin Procter LLP

9 100 Northern Avenue

10 Boston, MA 02210

11

12 NAOMI L. BIRBACH, ESQ.

13 CHRISTINE POTKAY, ESQ.

14 CHRISTINA DENISE GO, ESQ.

15 Goodwin Procter LLP

16 The New York Times Building

17 620 Eighth Avenue

18 New York, New York 10018

19

20

21

22

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 ATTORNEY ADVISOR:
2 ALTON HARE, ESQ.
3 Attorney-Advisor
4 U.S. International Trade Commission
5 500 E Street, S.W.
6 Washington, D.C. 20436
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Heritage Reporting Corporation
(202) 628-4888

1 P R O C E E D I N G S

2 (9:30 a.m.)

3 JUDGE BHATTACHARYYA: Good morning. Please be
4 seated.

5 Good to see everyone. We're here today for the
6 evidentiary hearing in Investigation No. 337-TA-1331,
7 Certain Outdoor and Semi-Outdoor Electronic Displays,
8 Products Containing Same, Components Thereof.

9 I'm Monica Bhattacharyya, Presiding ALJ. With
10 me is my attorney advisor, Alton Hare. Could counsel
11 please enter their appearances.

12 MS. SHAH: Good morning, Your Honor.

13 JUDGE BHATTACHARYYA: Good morning.

14 MS. SHAH: I'm Aarti Shah of the law firm
15 Kilpatrick Townsend & Stockton here on behalf of
16 Complainant MRI, Manufacturing Resources International.
17 And I'd like to introduce the rest of the people we have
18 here today. First, we have Mr. Dario Machleidt, Mitch
19 Stockwell, also from Kilpatrick Townsend. And --

20 MR. STOCKWELL: Good morning, Your Honor.

21 MS. SHAH: We have Mr. Alton Absher, Matthew
22 Meyer, David Reed. Next to him is Andie Anderson, who is
23 one of our NEXT advocates at her very first hearing or
24 trial ever. We have Ms. Kate Geyer, who is another one of
25 our NEXT advocates, one of our associates from Seattle.

Heritage Reporting Corporation
(202) 628-4888

1 Then we have Mr. John Harris and Mr. Craig Cannon. And our
2 paralegal Bruce Nelson is in the back.

3 With us today we also have Mr. Bill Dunn, who is
4 the president and CEO of MRI. Next to him is Alan Brand,
5 who is the CFO of MRI. In the back we have Mr. Mike Brown,
6 who is the VP of mechanical engineering, and we have Dave
7 Williams with us as well. With us, we also have our
8 experts, Mr. Hirshfeld, Dr. Pokharna, and Mr. Credelle.

9 I believe that's everyone. Thank you, Your
10 Honor.

11 JUDGE BHATTACHARYYA: Thank you.

12 MR. KLINE: Good morning, Your Honor.

13 JUDGE BHATTACHARYYA: Good morning.

14 MR. KLINE: My name is Doug Kline with the
15 Goodwin firm here on behalf of all of the Respondents. I
16 might just do the first couple of tables, Your Honor. So
17 many people. So I have with me PJ McCarthy of Goodwin,
18 Christie Larochelle of Goodwin, Naomi Birbach of Goodwin,
19 Srikanth Reddy of Goodwin, Harrison Gunn of Goodwin, and
20 Christie Potkay of Goodwin. And if I may just go to the
21 back of the room, Your Honor, to point out from Samsung I
22 have Mr. Dan Girdwood, Sungwoo Hur, Taewon Kim, and Jaewon
23 Kim.

24 Thank you, Your Honor.

25 JUDGE BHATTACHARYYA: Thank you.

Heritage Reporting Corporation
(202) 628-4888

1 We're starting out on the public record. We may
2 have members of the public present, so counsel please be
3 very careful about noting when we need to move onto the
4 confidential record, so that we can clear the room of
5 people who aren't authorized to see CBI.

6 Is there anything that we need to take care of
7 before we start with opening arguments?

8 MR. MACHLEIDT: Your Honor, Dario Machleidt on
9 behalf of MRI. I think we have the housekeeping matter of
10 giving you the estimated date and time of witnesses. I
11 believe you wanted hard copy every day. May I approach?

12 JUDGE BHATTACHARYYA: Yes, please.

13 Thank you.

14 MR. MACHLEIDT: Your Honor, again Dario
15 Machleidt. I'll be giving the opening statement for MRI.
16 May I proceed?

17 JUDGE BHATTACHARYYA: If there's nothing else
18 that needs to be discussed in terms of housekeeping, you
19 may proceed.

20 Are we fine to go ahead, Mr. Kline?

21 MR. KLINE: Just -- pardon me, not to interrupt,
22 but just administratively, the only other thing we can
23 think of, Your Honor, is we don't have ruling on the motion
24 to strike. And I don't know if that was something you
25 wanted to talk about before we begin our openings or not.

1 JUDGE BHATTACHARYYA: I'm issuing an order on
2 that this morning. If you --

3 MR. KLINE: I'm sorry.

4 JUDGE BHATTACHARYYA: That's fine. I can let
5 you know the result.

6 MR. KLINE: Sure.

7 JUDGE BHATTACHARYYA: It -- the motion is
8 granted. The motion to strike is granted as to paragraphs
9 8, 21, and 23 through 27. It's denied as to paragraph 14.
10 Respondents' High-Priority Objection Number 1 is sustained.

11 MR. KLINE: Thank you very much, Your Honor.

12 JUDGE BHATTACHARYYA: You may go ahead, please.

13 MR. MACHLEIDT: Your Honor, very briefly, you
14 mentioned that we're on the public record. You will see
15 MRI's opening and the slides are public. You will see a
16 few cites that have the little "C" at the bottom. Those
17 documents come from MRI's files, and we, of course, are
18 fine being on the public record for the opening statement.

19 JUDGE BHATTACHARYYA: Very well.

20 MR. MACHLEIDT: Mr. Goodin, whenever you're
21 ready. Thank you so much.

22 This is a case about two very different
23 companies. For the Complainant, you have Manufacturing
24 Resources International, or MRI. It builds high-quality
25 outdoor displays. MRI built its business over the course

Heritage Reporting Corporation
(202) 628-4888

1 of two decades based on the determination and innovation of
2 its employees.

3 Make no mistake, MRI is an American success
4 story. Bill Dunn, its founder and CEO, started the company
5 in Georgia, growing it from zero employees back then to
6 over -- to almost 200 today. It has thrived in an arena
7 where companies routinely die young.

8 MRI has survived, despite competition from the
9 likes of Samsung. Samsung came to the outdoor display
10 business late. It was a follower with an unsuccessful
11 product. And it needed to find a way to fix its failures
12 in the market. Its solution was to infringe MRI's patents
13 and use MRI's own technology to compete with MRI.

14 When this hearing is over, and when the briefing
15 is done, the evidence will show that MRI is entitled to an
16 exclusion and cease and desist order. MRI deserves to
17 compete in the market without having to deal with Samsung's
18 infringing displays.

19 I have here on the slide some of the MRI
20 witnesses who will tell its side of the story. First up,
21 we have Bill Dunn, the founder and CEO. He will tell you,
22 well, frankly, we're here largely because of a unique
23 cooling technology that he came up with long ago.

24 Next we'll hear from Dave Williams. He has
25 worked with Bill Dunn on and off, frankly, over the course

Heritage Reporting Corporation
(202) 628-4888

1 of more than two decades, and he will talk about an
2 important meeting that took place between MRI and a now
3 bankrupt company named Vertigo.

4 Alan Brand is MRI's CFO. He's going to tell us
5 about some of the financial issues that matter in a case
6 like this. He's somewhat unique in terms of MRI because
7 he's relatively new to the company, having joined just a
8 few years ago.

9 Mike Brown will testify about many of the
10 technical features of the domestic industry products. And
11 he'll also tell you about an analysis that MRI did of some
12 of the Samsung accused products.

13 Mr. Brown's testimony will give way to MRI's
14 technical experts, Tom Credelle and Himanshu Pokharna.
15 They will tell you how and why Samsung's displays infringe
16 and why we believe Your Honor should reject Samsung's
17 parade of defenses.

18 All of MRI's fact witnesses will talk in some
19 degree about its Alpharetta, Georgia facility, which you
20 see here. MRI designs, engineers, manufactures all of its
21 outdoor displays in that facility. You might have seen an
22 MRI sign on the way to the courthouse today, because MRI
23 has deployed over 25,000 of these throughout the globe,
24 many of them here in D.C.

25 You'll often find these large displays outside

1 in areas that are exposed to direct sunlight. That means
2 that they need to be extra bright for anybody to actually
3 see what's on the display. It also means that these
4 products get hit with heat sources from many different
5 ways. They get baked by the sun that's cooking -- that is
6 often all around them, and they are also baked from the
7 inside by their internal components and the heat that comes
8 from the backlight.

9 Every single one of MRI's asserted patents
10 focuses on attempting to manage the temperature of the
11 outdoor displays.

12 I want to spend some of my time up here talking
13 about the events that led to the asserted patents because
14 it's an important part of the case that's going to come up
15 on several occasions throughout the hearing.

16 Mr. Dunn will tell you about how he worked for
17 years with different types of displays. He saw an
18 opportunity to start a new company and ultimately looked
19 for ways to differentiate MRI from the competition. One of
20 those ways was to find a solution to the problem that we
21 just talked about; namely, the unrelenting heat sources
22 that the outdoor displays continue to face.

23 You'll hear from several of MRI's witnesses, and
24 potentially some of Samsung's, about how a known way to
25 cool these units used to be to place large, unreliable

1 air-conditioning units right on the display. This was
2 great in theory, but it often failed in practice. Long
3 ago, Mr. Dunn decided that using air-conditioning units was
4 not the right way to go.

5 Ultimately, he came up with a new idea to solve
6 this serious issue that plagued the industry. Mr. Dunn's
7 real-world experience with displays led to the e-mail that
8 you see here. By November of 2007, Mr. Dunn came up with a
9 new idea that he called the air-to-air intercooler.
10 Mr. Dunn's experience with, frankly, real-world failures
11 made him obsess about overcoming this issue of cooling the
12 units. While in Korea on a business trip, he came up with
13 this new cooling idea.

14 You see right here in green that already back
15 then in November of 2007, the idea was to cool a closed
16 loop of air using an open loop that goes through the
17 displays. Your Honor, I have no intention of turning my
18 opening into a tech tutorial, but some information that
19 comes directly from Bill Dunn will help us better
20 understand the meaning behind the words that we see in this
21 e-mail.

22 Bill Dunn will tell you about a CAD file titled
23 "new file from Bill." Like the e-mail, it also has a
24 November 2007 date. The product that's shown in this early
25 CAD is a 47-inch car wash display. As the name gives away,

1 the display was put next to car washes. It was in many
2 ways a predecessor to the domestic industry products that
3 you're going to hear about during this hearing.

4 The screenshots that we're going to go through
5 from the CAD file are helpful to put images to some of the
6 words in Mr. Dunn's e-mail. Here we've sliced the display
7 down the center, and what you start to see are some of the
8 closed loop fans and the open loop fans that were present
9 in Mr. Dunn's early idea.

10 What we have here is the same CAD, but it has
11 been -- the unit has been tipped forward on its face, and
12 the arrows show the direction of airflow within the
13 display. The red arrows for the closed loop, and the blue
14 signify the open loop of air coming in from the bottom and
15 ultimately being exhausted out from the top of the display.
16 Once more, you see the fans that make the airflow possible.

17 This is another view of that same CAD file, and
18 it shows a few other items that Bill Dunn also conceived of
19 back by November of '07. The plate and the channel that
20 you see here work to accelerate the open loop air that
21 flows through the display, which in turn improves its
22 cooling ability.

23 That brings us to Samsung's infringement. The
24 evidence will show that Samsung had a tough time breaking
25 into the outdoor market. It eventually tore down some of

1 MRI's products and, after that, came out with the
2 successful OH line of displays that are at the heart of
3 this dispute.

4 That leads to the accused products. There are
5 two broad categories of Samsung accused products. There
6 are the big ones and the medium ones. And the medium ones
7 are still pretty big, starting at 46 inches along the
8 diagonal.

9 You're going to hear how MRI analyzed several of
10 these units and confirmed what Samsung's own documents
11 show; namely, that they infringe MRI's patents. The mix of
12 patents and products seems large at first, but it actually
13 breaks down into a few distinct categories.

14 The medium and large units infringe both the
15 '595 and the '322. The medium-sized units infringe the
16 '287, and the large ones infringe the '740 and the '142.

17 Your Honor, my next couple of slides are a
18 preview of some of the fights and disputes we're going to
19 hear about in terms of infringement and validity, but I
20 don't intend to get into the weeds on any issue just yet.

21 For the '595 and the '322 patent, Samsung hopes
22 to avoid a finding of infringement by taking positions that
23 are contrary to your claim constructions, that are contrary
24 to Samsung's own internal documents and the testimony of
25 its witnesses, and for these two patents, actually rely on

Heritage Reporting Corporation
(202) 628-4888

1 additional unclaimed elements, which is irrelevant when it
2 comes to infringement of the two patents that you see here.

3 Samsung's attempt to escape infringement for the
4 '287 doesn't fare any better. Once more, its arguments
5 contradict what we see in Samsung's own documents and what
6 we hear from the testimony of its own witnesses.

7 The same goes for the litigation-manufactured
8 testing that it ran to try to prove non-infringement. And
9 what's more, that conflicts with its business and technical
10 documents and testimony.

11 That same theme carries over for the '740 and
12 '142. Once again, Samsung's litigation arguments conflict
13 with its technical and business documents. The situation
14 is even a little bit stranger when it comes to these two
15 patents because Samsung advertises that its displays are
16 IP56 rated. That means that they are free of dust and
17 contaminants and things like that.

18 You will hear from Dr. Pokharna about why that
19 type of representation holds true and confirms his opinion
20 that these large units infringe the '740 and the '142.

21 Samsung has raised a host of invalidity
22 theories. None of them rise to the level of clear and
23 convincing evidence that justifies finding any of the
24 patents should not have been issued in the first place.

25 We'll start once more with the '595 and the

1 '322. None of Samsung's references teach the plate and the
2 channel that is required by these patents. The reason is
3 simple: Bill Dunn is the first person who appreciated the
4 benefits of constricting or squeezing air that goes through
5 the display to help improve its cooling ability. Bill
6 Dunn's real-world experience led to the novel inventions
7 that are in these two patents.

8 Samsung's theoretical invalidity arguments for
9 the '287 patent are quite similar. Again, they run into
10 real-world problems. Samsung pieces together different
11 references to try to attack this patent, but you'll hear
12 from Dr. Pokharna that no skilled artisan would actually
13 combine the references that Samsung has raised. It has to
14 look to, frankly, what you see here, a desktop indoor
15 computer to help manufacture its invalidity argument.
16 You'll hear from MRI's experts that no skilled artisan
17 would look to an item like that, that lives inside, far
18 away from direct sunlight, to try to invalidate the '287.

19 The final invalidity fight is over the '740 and
20 the '142. The dispute here centers around what exactly is
21 a heat exchanger. Dr. Pokharna will explain that a heat
22 exchanger is a known specific class of thermal management
23 devices. Samsung will want you to believe that anything
24 that exchanges heat is a heat exchanger. When this hearing
25 is done, you'll understand why that position is wrong.

1 Samsung's non-infringement and invalidity
2 arguments are weak. That has led them to spend a lot of
3 time and a lot of briefing paper on invalidity and
4 inequitable conduct arguments that are based on the notion
5 that Bill Dunn lied to the Patent Office.

6 Samsung spends dozens of pages throughout all of
7 the materials in this case trying to convince you that the
8 ideas that are reflected in the asserted patents come not
9 from Bill Dunn but, frankly, come from a host of other
10 people. According to Samsung, Bill Dunn came up with
11 nothing.

12 Samsung's inventorship-based defenses run into a
13 problem, and that is the facts and the evidence that we
14 have seen building up throughout this case and that we're
15 going to present to you during this hearing.

16 We already spoke about the November e-mail and
17 the November 2007 CAD file from Bill. Bill Dunn moved
18 quickly, both to take his idea and patent it, and also to
19 actually develop and create a constricted open loop and
20 closed loop system after he came up with the idea by
21 November of '07.

22 December of 2007 is an important period when it
23 comes to the inventorship fight between the parties.
24 That's when MRI first met with representatives from a
25 company called Vertigo. These two companies were supposed

Heritage Reporting Corporation
(202) 628-4888

1 to collaborate on a project to build outdoor displays for
2 Las Vegas. It was important to find a way to keep these
3 units cool in the hot temperature that is often present in
4 that area, in Las Vegas.

5 You'll hear that Bill Dunn, Dave Williams, and
6 others from MRI met with a representative from Vertigo by
7 the name of Chris Bolton, sometime between December of '07
8 and March of '08, and they met and discussed various
9 cooling options for this Las Vegas project of theirs.
10 Mr. Bolton wanted to use air-conditioning units, the tried
11 but not yet true or not quite true system that was common
12 in the industry. Mr. Dunn, on the other hand, told
13 Mr. Bolton about Bill Dunn's new constricted open/closed
14 loop system that he had just come up with.

15 During a meeting between the parties, Mr. Dunn
16 asked one of his colleagues to go to a whiteboard and draw
17 this new constricted open loop/closed loop idea on the
18 board to help explain it in more detail to Mr. Bolton.
19 During that time, Chris Bolton sketched what was on the
20 whiteboard in his open personal notebook.

21 What you see here is at the heart of the
22 inventorship fight. After that whiteboard meeting,
23 Mr. Bolton sent Bill Dunn what you see in terms of this
24 attached -- or this CAD rendering that was attached to an
25 e-mail of his. That CAD rendering shows an embodiment of

1 the constricted open and closed loop system. A sketch of
2 that CAD rendering was included in the MRI patent
3 application that ultimately led to the '595 and the '322.
4 Samsung has latched on to this fact to argue that Bill Dunn
5 stole his idea from Mr. Bolton because of the similarity
6 between these two images.

7 Samsung's defense requires it to selectively
8 pick and choose the facts that it likes while ignoring the
9 facts that it doesn't. The actual evidence that is
10 relevant to this inventorship dispute will come out during
11 this hearing, and it's summarized on the timeline in front
12 of you. Mr. Dunn came up with his new idea by November of
13 2007. He shared that idea with, among others, Chris
14 Bolton. Mr. Bolton made a good-looking sketch of that idea
15 and that ultimately ended up in the asserted patents, the
16 '595 and the '322, or a sketch of that.

17 But everything that you see in both the sketch
18 on the right and the CAD rendering can be traced to what
19 Bill Dunn came up with by November of 2007 before Vertigo
20 and Mr. Bolton were even a thought in anybody's mind at
21 MRI.

22 Samsung's response to this evidence is simply to
23 ignore it. It filed its 250-page prehearing brief, and in
24 there it said nothing about Bill Dunn's November 2007
25 e-mail. There was not one word about that e-mail. Samsung

1 also never asked Bill Dunn about the "new file from Bill,"
2 that CAD file, during any of his depositions. Samsung has
3 no response to the actual facts that are relevant to this
4 inventorship dispute.

5 Samsung's remaining inventorship arguments try
6 to move slightly away from the Bolton story, but they fail
7 just the same. Samsung accuses Bill Dunn of violating
8 various nondisclosure agreements and taking the idea for a
9 display and brackets, apparently, from Samsung or a
10 gentleman by the name of Dwayne Gavel or potentially both.

11 At the end of the day, the facts will show that
12 none of that is true and Samsung's arguments are simply
13 another way for it to try and attack Mr. Dunn's credibility
14 during the course of this hearing.

15 Your Honor, I'll end with this: Before MRI
16 initiated this investigation, Samsung, one of the Samsung
17 Respondents, reached out to Bill Dunn and complimented his
18 work and the company's work. There's no accusation of
19 violating any nondisclosure agreements. There's no
20 accusation that Bill Dunn built his company on stolen
21 technology.

22 Instead, the digital out-of-home leader for
23 Samsung SDS America told Mr. Dunn that what he had
24 accomplished at MRI was both impressive and unique.
25 Samsung's words are better than any I could come up with.

Heritage Reporting Corporation
(202) 628-4888

1 It praised MRI for entering into a virgin space and
2 pioneering a new business model that was -- that has raised
3 the bar for high-quality standards. He wanted Samsung to
4 embrace MRI's technology and blend it in with Samsung's
5 displays. You see that right here.

6 Unfortunately, that was already taking place
7 with Samsung choosing to infringe. These facts justify an
8 exclusion order that stop Samsung from competing with MRI
9 while using MRI's own technology against it.

10 With that, Your Honor, I'm happy to pass the
11 podium to my friends at Goodwin. Thank you.

12 JUDGE BHATTACHARYYA: Okay.

13 MR. KLINE: Your Honor, may I hand up some hard
14 copies of our presentation?

15 JUDGE BHATTACHARYYA: Yes, you may.

16 MR. KLINE: How many copies would you like, Your
17 Honor? We have plenty.

18 JUDGE BHATTACHARYYA: Two would be wonderful.

19 MR. KLINE: Thank you, Your Honor.

20 Your Honor, you will see a few slides that have
21 the C designation on a piece of evidence. We sent to the
22 MRI folks last night the slides that are C-designated and
23 refer to MRI, and asked if they had any objection to those
24 being shown in open court. They said they do not. We're
25 not asking that anything be de-designated, Your Honor, but

1 nobody objects, as I now understand, to displaying this
2 information in open court here this morning.

3 JUDGE BHATTACHARYYA: Okay. Thank you.

4 MR. KLINE: So thank you, Your Honor. As I
5 mentioned, my name is Doug Kline and I must say I am very
6 proud to stand before you on behalf of my entire team and
7 the Respondents. The Respondents are Samsung Electronics,
8 Samsung SDS, Palmer, and Coates.

9 If I could say at the outset, Your Honor, if
10 you'll indulge me, I would like to say thank you to my
11 team. I know the Court is very aware of how much effort
12 goes into these things, and it's just my privilege to stand
13 here and represent them all, and I have the honor of doing
14 so. And thank you to the Court as well for making this
15 forum available to all of us.

16 And I should say that, generally, Your Honor,
17 the Respondents are, in fact, very pleased to have their
18 day in court because we're confident that after reviewing
19 the evidence in the case and hearing the arguments from
20 both sides, the Court will agree that none of the
21 Respondents has committed any violation of Section 337 of
22 the Tariff Act. And that is for a number of reasons.

23 First and foremost, the Respondents have not
24 infringed any of MRI's asserted patents. But, in addition,
25 the evidence will show that MRI's founder, Mr. William

1 Dunn, obtained the patents that MRI is asserting in this
2 investigation by taking and claiming as his own ideas,
3 confidential information, and technology that he only
4 learned of from third parties, including Samsung and, as
5 you've heard this morning already, a company called Vertigo
6 Group.

7 As a result, the patents that MRI is asserting
8 in this investigation, they're invalid and they're
9 unenforceable. And they're invalid in view, as well, of
10 the prior art.

11 I'd like to take my time during my opening
12 presentation to talk generally about three areas. First,
13 I'll talk generally about an overview of the investigation.
14 Next I'll move on to the technology. And after, that I'll
15 talk about patents and products.

16 Three of the Respondents in the case, Your
17 Honor, are part of the Samsung organization, broadly
18 speaking. And I'm sure the Court is quite familiar with
19 the Samsung brand and its long history of innovation.
20 Samsung began its electronics business in the 1960s. It
21 launched its thin-film transistor liquid crystal display
22 business in 1991. You'll see that written in many
23 documents as TFT LCD.

24 By the early 2000s, Samsung was manufacturing
25 40-inch, then 46-inch, and then 54-inch LCDs, which were

1 the largest in the world at the time. By 2007, Samsung was
2 mass-producing 70-inch LCD displays. Nobody else in the
3 world was doing that at that time.

4 And as it turns out, that fact does play a
5 significant role in the events that ultimately lead us into
6 this hearing room today, because it was in 2007 that a
7 media company called Outdoor Promotions issued a request
8 for proposal to build a prototype of a digital outdoor
9 display that could be deployed in bus stations along the
10 Las Vegas strip.

11 Vertigo was well positioned to respond to the
12 Outdoor Promotions RFP. And during the hearing this week,
13 we will hear from Chris Bolton, one of Vertigo's founders.
14 Mr. Bolton will explain that at the time Outdoor Promotions
15 sent out its RFP, Vertigo had already designed, built, and
16 sold thousands of indoor and outdoor displays.

17 So in 2007, Vertigo submitted a proposal in
18 response to Outdoor Promotions' RFP. Just a few weeks
19 later, it won the contract. Vertigo's proposal noted that
20 it would act as the designers of the enclosures and
21 housings, integrators of all equipment, project management
22 lead, and primary interface between Outdoor Promotions and
23 the consortium of companies involved.

24 Vertigo's winning proposal further explained
25 that its display unit would be designed to include a closed

1 loop environmental control system to maintain the
2 temperature of the internal components. Vertigo's proposal
3 is dated November 20th of 2007. And we heard a moment ago
4 about an e-mail that Mr. Dunn sent on November 27th of
5 2007.

6 This November 20th date is months before the
7 earliest priority date that MRI claims for any of the MRI
8 patents that we will be talking about this week.
9 Mr. Bolton will explain that Vertigo was going to use its
10 expertise to design and build the prototype, including a
11 cooling system, for the Outdoor Promotions project and that
12 it would use a 70-inch Samsung display.

13 Vertigo did speak with MRI about the project
14 because MRI was known at the time for making
15 high-brightness LED backlights. Vertigo envisioned that
16 the Outdoor Promotions prototype would include a Samsung
17 LCD and MRI LED backlight, and it would all be housed
18 within a Vertigo enclosure. And Vertigo and MRI did begin
19 collaborating on the Outdoor Promotions project in December
20 of 2007.

21 And, in fact, the companies executed a
22 nondisclosure agreement shown here on slide 6, dated
23 December 19th of 2007. Under that NDA, Vertigo provided
24 MRI with technical drawings of what Vertigo referred to as
25 its wedge display. Over the following months, Vertigo

Heritage Reporting Corporation
(202) 628-4888

1 continued to give MRI confidential information and know-how
2 relating to cooling systems for digital out-of-home
3 displays, including not just designs specific to the
4 Outdoor Promotions project but for other projects as well.

5 But unbeknownst to Vertigo at the time, MRI was
6 copying into MRI patent applications ideas and technical
7 information that Vertigo was providing to MRI under this
8 NDA. As it turns out, MRI was doing the same thing with
9 technical information that Samsung was sharing with MRI,
10 also under an NDA.

11 Those MRI patent applications led to the patents
12 that MRI is asserting today against Samsung in this
13 investigation. So the bottom line is the patents that MRI
14 is accusing Samsung of infringing here incorporate and rely
15 upon confidential technology that MRI took without
16 permission from Vertigo and from Samsung.

17 MRI did not tell the Patent Office about any of
18 this. To the contrary, Mr. Dunn filed patent applications
19 and swore a false oath that he was the sole inventor of
20 ideas that were not his. MRI's patents are invalid and
21 unenforceable for at least that reason.

22 Let me talk about the technology we'll be
23 learning a lot about. The patents that MRI is asserting
24 here do concern cooling systems for electronic displays,
25 such as LCD displays. They typically include a panel, an

Heritage Reporting Corporation
(202) 628-4888

1 LED backlight, electronic driver circuits for controlling
2 the images being displayed and controlling the cooling
3 system. And as the caption of this investigation points
4 out, the case is about outdoor and semi-outdoor displays in
5 particular.

6 Displays of this type can be used, for example,
7 at train stations, other public spaces, as digital menu
8 boards, for example, at fast-food drive-through lanes. The
9 cooling systems in these displays have to take into account
10 a variety of environmental factors such as solar radiation,
11 rain, and pollution.

12 The displays produce heat. Solar radiation and
13 outdoor temperatures produce more heat. That heat must be
14 dissipated. The cooling systems use a combination of
15 convection and conduction to achieve the cooling necessary.

16 Let me talk about patents and products. The
17 asserted '595 and '322 patents share a common specification
18 and they name William Dunn as the sole inventor. MRI calls
19 these patents its constricted convection patents because
20 all of the asserted claims refer expressly to constricted
21 convection.

22 MRI contends that the '595 and '322 patents are
23 entitled to a priority date of March 26th, 2008. That's
24 the date that MRI filed what I suspect we will all refer to
25 this week as the '454 provisional patent application. The

Heritage Reporting Corporation
(202) 628-4888

1 date is very important. I'll come back to it later.

2 MRI refers to the '287 patent as the closed
3 loop/open loop patent. One claim of this patent asserted
4 here, claim 12, does not refer to constricted convection.
5 MRI filed this application as a continuation-in-part of the
6 '595 patent but claims it's entitled to a priority date of
7 March 3rd. We'll come back to this date as well.

8 MRI calls the '740 and '142 patents the heat
9 exchanger patents. Those patents also stem from an
10 application filed as a continuation-in-part of the '595
11 patent. MRI claims these patents are entitled to a
12 priority date of December 18th, 2008.

13 MRI broadly accuses two categories of Samsung's
14 products of infringing the asserted patents. The Samsung
15 OH46 and 55 products we sometimes refer to as the mid-sized
16 products. The Samsung OH75 and 85 products, we refer to
17 those as the large format products. I think earlier
18 presentations said large size. It's the same thing.

19 As I mentioned at the claim construction
20 hearing, Your Honor, the Samsung mid-sized products account
21 for about 95 percent of the sales of the accused products.
22 We will hear later this week from Sungsu Lee of Samsung.
23 He'll testify about the accused Samsung products, how they
24 operate and how they were developed. Mr. Lee has been with
25 the company for about eight years. Today, he's a staff

Heritage Reporting Corporation
(202) 628-4888

1 engineer on the development team of Samsung Electronics'
2 Visual Display Business Unit. He'll explain to us that
3 Samsung generally relies upon high-velocity ambient air to
4 cool displays.

5 Mr. Lee will testify that Samsung designed and
6 developed the accused products in the 2015/2016 time frame,
7 eight or nine years after the priority dates that MRI
8 claims for its patents. In this business, eight or nine
9 years, that's a long time.

10 Today, the technology described in these patents
11 is 15 years old. LCDs backlights and displays in the
12 accused products are much evolved over the components that
13 MRI was working with back in 2007. The LCDs are capable of
14 withstanding harsher conditions and operating at higher
15 temperatures. And, as a result, today's outdoor displays
16 are substantially easier to operate and to maintain than
17 systems that were built back in 2007. So it's neither
18 surprising nor remarkable that none of the accused products
19 infringes any of MRI's asserted patents.

20 While all of the accused products use ambient
21 air for cooling, the components of the mid-sized and the
22 large-sized product cooling systems are not identical.

23 MRI is asserting 15 claims across five related
24 patents, 10 claims against the large format displays, 5
25 claims against the mid-sized products. MRI's attempt to

1 cover all of the accused products while simultaneously
2 trying to prove the technical prong of domestic industry
3 and avoid the prior art, creates problems for MRI and its
4 experts.

5 And we'll hear from Dr. Dean Neikirk and he'll
6 explain why there are many reasons why no claim is
7 infringed, but there are a handful I'd like to point out
8 now.

9 The mid-sized products do not infringe any of
10 the asserted patents for at least three reasons. They
11 don't include a system for cooling an electronic display
12 having a posterior display surface that is contained within
13 a housing; they do not include a display having display
14 posterior surface with no electronics mounted on it; and
15 the mid-sized products do not include a display that is
16 coolable by any combination of closed loop isolated gas --
17 pardon me, that is coolable by any closed loop of isolated
18 gas.

19 Similarly, the large format products do not
20 infringe any asserted patent either. First, the products
21 do not include any closed loop. Since 2018, Samsung's
22 large format products use cooling techniques that leverage
23 ambient air that enters and exits the unit. It's not
24 closed. Also, the products do not include a constricted
25 convection plate. The bracket that MRI claims is the

Heritage Reporting Corporation
(202) 628-4888

1 constricted convection plate doesn't constrict airflow. It
2 actually does the opposite.

3 And, in any event, MRI's attempt to prove
4 infringement has been haphazard at best. Its experts did
5 not conduct any testing on any of the accused products. In
6 fact, MRI's expert, Mr. Credelle, he had never even seen an
7 accused product before he submitted his report. MRI's
8 other infringement expert, Dr. Pokharna, he has never seen
9 a current large format accused product.

10 So despite that it's MRI's burden to prove
11 infringement and that many of the asserted claims include
12 functional limitations, such as cooling in certain ways,
13 circulating air in closed loops, MRI's experts made no
14 effort to operate the products or to conduct any testing to
15 confirm whether Samsung's products meet those very specific
16 claim limitations.

17 Dr. Neikirk, on the other hand, will explain the
18 work that he did. He disassembled the accused products to
19 see firsthand how they're built. He ran batteries of tests
20 on the products to learn how they function. He observed
21 how air moves through the products and how it impacts
22 internal temperatures in the products.

23 He documented his findings in detail. From
24 Dr. Neikirk's inspections, tests, and analyses, he saw that
25 the accused products do not operate the way that MRI and

1 its experts have assumed or at least argued that they do.
2 And Dr. Neikirk concluded, as he'll explain in his
3 testimony, that the accused Samsung products do not
4 infringe any of MRI's asserted patents.

5 And, in addition, MRI's patents are invalid.
6 Robert Smith-Gillespie will testify later, and he's an
7 engineer with extensive professional experience in the
8 field of electronic displays, including LCD displays and
9 backlighting. He'll explain that the cooling systems
10 claimed in MRI's patents reflect simple heat transfer
11 concepts that were implemented for cooling electronic
12 displays long before MRI filed any of these patent
13 applications. Figure 5D of MRI's '595 patent is shown, for
14 example, here on slide 17.

15 Many prior art references disclose cooling
16 systems that use fans and basic principles of forced
17 convection to direct ambient air across heat-generating
18 components to remove heat and cool the display. Take the
19 Kim patent, for example, shown here on the screen. It
20 describes a system for cooling heat generated from an LCD
21 backlight. It includes a constricted convection plate,
22 shown in green, that defines a channel, shown by the
23 colored arrows, to push airflow along the back side of the
24 display.

25 Similarly, Takeuchi and Kimura, also shown on

1 this slide, describe open-loop cooling systems
2 incorporating these same features; constricted convection
3 plates shown in green and constricted convection channels
4 with colored arrows.

5 And the prior art taught closed loop systems as
6 well. The prior art reference Karppanen describes a dual
7 open and closed loop system for an LCD display. It
8 describes weatherproof and sealed closed loop of green air
9 that runs along the front and back of its display, shown in
10 blue here on slide 18. The closed loop is isolated from
11 the external ambient air coming into the display.

12 Karppanen also describes an open loop air
13 pathway, shown on slide 18 in pink, behind the display.
14 And the open and closed loops are separated by a heat
15 exchanger, shown in the center of the figure, that
16 transfers heat from warm air in the closed loop to cooler,
17 open loop air.

18 Mr. Smith-Gillespie will explain how these four
19 primary references, alone or in view of secondary
20 references and knowledge in the art, invalidate the claims.
21 And, in fact, just last week, the United States Patent and
22 Trial Appeal Board granted Samsung's petitions for inter
23 partes review of four of the asserted patents. PTAB's
24 decision on a fifth is pending. The PTAB noted expressly
25 that the evidence of obviousness is very strong and the

Heritage Reporting Corporation
(202) 628-4888

1 evidence of non-obviousness is very weak.

2 Of course, there is an even more serious problem
3 with MRI's patents. We've all heard the expression that
4 it's amazing how much a group of people can accomplish when
5 nobody cares who gets the credit. Bill Dunn is the
6 opposite. He wants all the credit, even for ideas that
7 aren't his.

8 As I mentioned, Vertigo began collaborating with
9 MRI in December of 2007. A few months later, on March 4th
10 of 2008, Chris Bolton did send Mr. Dunn an e-mail. The
11 e-mail included CAD renderings that Mr. Bolton and his
12 colleague, Dwayne Gavel, created for another project, not
13 the Las Vegas project. We'll also hear from Mr. Gavel
14 later this week.

15 Note the subject of Mr. Bolton's March 4th
16 e-mail: "Alternative 70-inch LCD displays." Mr. Bolton
17 wrote: "Bill, I never got the chance to discuss my
18 thoughts for a 70-inch LCD enclosure system last week." He
19 went on: "I see this as a separate development from Las
20 Vegas, which is specific in its configuration to the OP" --
21 that's Outdoor Promotions -- "shelter layout."

22 "I have attached some information to prime your
23 thought process." Mr. Bolton included Vertigo CAD
24 renderings with his e-mail. One of those was a depiction
25 of a dedicated enclosure for an LCD display. Mr. Bolton

Heritage Reporting Corporation
(202) 628-4888

1 included with his March 4th e-mail his design for a bus
2 station shelter incorporating the dedicated enclosure. And
3 Mr. Bolton included an exploded view of the dedicated
4 enclosure display that he designed showing its cooling
5 system air paths. March 4th of 2008.

6 Three weeks later, on March 26th of 2008, MRI
7 filed its provisional patent application that we call the
8 '454 application. It names one inventor, William Dunn. It
9 includes Figure 9. This is the first time that MRI
10 included Figure 9 in one of its patent applications. And
11 it was in this '454 application, which includes Figure 9,
12 that for the first time MRI used the term "constricted
13 convection" in any of its patent applications.

14 MRI claims the filing date of this '45
15 provisional March 26th, 2008 as the priority date for the
16 asserted '595 and '322 patents. The patents name William
17 Dunn as the sole inventor, and they also include Figure 9.
18 The '595 and '322 patents describe the figure as "a
19 perspective view of an exemplary embodiment of the
20 constricted air cooling system for an electronic display of
21 the present invention with an optional isolated gas cooling
22 system."

23 Let's compare Chris Bolton's March 4th CAD
24 rendering to Figure 9 of MRI's March 26th provisional
25 patent application. We see the figures together on slide

Heritage Reporting Corporation
(202) 628-4888

1 29. And we see how they relate to one another.

2 Can there be any doubt that Figure 9 is a hand
3 tracing of Chris Bolton's CAD drawing? Who traced it?
4 Nobody at MRI or its law firm will say. Now, years ago,
5 during prior litigation relating to these same patents,
6 Mr. Dunn claimed that Mr. Bolton himself drew Figure 9
7 during a brainstorming white session. Mr. Bolton will
8 testify, however, that he most certainly did not. In any
9 event, that's not quite the story that MRI tells in this
10 investigation.

11 MRI's prehearing brief claims that an e-mail
12 that Mr. Dunn sent to his attorneys in November of 2007
13 justifies Mr. Dunn's conduct. MRI argues, and we heard
14 during MRI's opening statement, that the e-mail shows that
15 Mr. Dunn had thought of his constricted convection
16 invention before he received Mr. Bolton's March 4th e-mail.

17 Well, again, let's take a look at the e-mail.
18 Mr. Dunn refers to a cooling scheme that he describes as an
19 air-to-air intercooler. He does not refer to constricted
20 convection. He doesn't use the term "constricted
21 convection" or "constricted convection plate" or
22 "constricted convection channel."

23 If Mr. Dunn had thought of his so-called
24 constricted convection invention in November of 2007, why
25 isn't it disclosed in MRI's March 3rd, 2008 provisional,

Heritage Reporting Corporation
(202) 628-4888

1 the one they filed the day before receiving Chris Bolton's
2 e-mail? MRI concedes that it isn't. MRI does not claim
3 priority to its March 3rd application for any of the claims
4 of what they call the constricted convection patents.

5 Instead, for those patents, MRI claims priority
6 to March 26th, 2008. That's MRI's '454 provisional.
7 That's the one that includes Figure 9. That's the one they
8 filed three weeks after receiving Chris Bolton's e-mail.
9 Mr. Dunn's e-mail and MRI's new story do not explain why,
10 if Bill Dunn really had thought of constricted convection
11 air cooling in November of 2007, why did MRI leave that out
12 of their March 3rd provisional? And they don't explain
13 why, as MRI concedes, MRI's constricted convection patent
14 claims are only supported by the application they filed
15 three weeks after receiving Mr. Bolton's e-mail and
16 including Figure 9.

17 Well, what did MRI do with the other images of
18 the Vertigo designs that were included with Mr. Bolton's
19 e-mail? Remember the other two CADs that Chris Bolton
20 sent? Here we see Vertigo's dedicated enclosure system on
21 the left. On the right, we see a clip from an MRI
22 document.

23 MRI took Chris Bolton's dedicated enclosure
24 rendering, they copied it, they labeled it MRI proprietary
25 information, and they shopped it to Hyundai in July of

1 2008. How about the bus shelter? This is -- on the left,
2 we see Mr. Bolton's bus shelter, March 4th, 2008. What did
3 MRI do with it? They copied it, they labeled it MRI
4 proprietary information, and they shopped it to Xperex
5 Corporation in July of 2008.

6 And MRI did the same thing with Samsung
7 confidential information. Recall MRI and Vertigo were
8 considering using Samsung screens. MRI asked Samsung for
9 help and Samsung was glad to help. The companies entered
10 into a nondisclosure agreement to facilitate that. And
11 under that NDA, Samsung sent CAD files to MRI.

12 What did MRI do with those CAD files? MRI
13 copied Samsung's CAD files into its '595 and '322 patents,
14 where the Samsung files appear as Figure 2 in those
15 patents. MRI never asked for Samsung's permission to do
16 that, and MRI never told Samsung it was doing it, and it
17 never told the Patent Office it was doing it.

18 And, again, for MRI, this course of conduct was
19 all just par for the course. And this conduct, claiming
20 Chris Bolton's ideas as their own, submitting Samsung
21 confidential information to the Patent Office and not
22 telling Samsung or the Patent Office, that conduct was at
23 the least inequitable; it infected not just the '595 and
24 '322 patents, but the other three related asserted patents
25 as well.

Heritage Reporting Corporation
(202) 628-4888

1 So the evidence will show, Your Honor, that the
2 Respondents have not infringed any MRI patent. The
3 evidence will show that those patents are invalid and
4 unenforceable. And we're confident, as a result, the
5 evidence will show there has been no violation of the
6 Tariff Act.

7 Thank you very much, Your Honor. We're looking
8 forward to the week.

9 JUDGE BHATTACHARYYA: Thank you.

10 MR. MACHLEIDT: Your Honor, may we proceed with
11 our first witness?

12 JUDGE BHATTACHARYYA: Yes, please go ahead.

13 MR. MACHLEIDT: MRI calls Bill Dunn to the
14 stand. And while Mr. Dunn comes up to the stand, may we
15 hand out some binders? And I believe you would like the
16 appendix of potential exhibits, correct? I'm happy to do
17 it now or later.

18 JUDGE BHATTACHARYYA: Right. I typically just
19 take the demonstratives. I don't need the big binders of
20 all documents.

21 MR. MACHLEIDT: Perfect. Thank you, Your Honor.

22 JUDGE BHATTACHARYYA: Good morning, Mr. Dunn.

23 THE WITNESS: Good morning, Your Honor.

24 JUDGE BHATTACHARYYA: Do you understand that
25 you're under an obligation to testify truthfully here

1 today?

2 THE WITNESS: I am.

3 JUDGE BHATTACHARYYA: Would you please raise
4 your right hand.

5 Whereupon--

6 WILLIAM DUNN,
7 having been first duly sworn/affirmed, was examined and
8 testified as follows:

9 THE WITNESS: I do.

10 JUDGE BHATTACHARYYA: Thank you.

11 MR. MACHLEIDT: May I proceed, Your Honor?

12 JUDGE BHATTACHARYYA: Yes, you may. We're on
13 the public record, as you know.

14 MR. MACHLEIDT: Yes. And I've a big red note in
15 my outline for when we're going to have to go on the
16 confidential record. Thank you, Your Honor.

17 JUDGE BHATTACHARYYA: Good. Thank you.

18 DIRECT EXAMINATION

19 BY MR. MACHLEIDT:

20 Q. Mr. Dunn, please introduce yourself to everybody
21 in the courtroom.

22 A. I'm Bill Dunn, the founder and president and CEO
23 of Manufacturing Resources International, MRI.

24 Q. How long have you worked at MRI?

25 A. I incorporated MRI in December 2004.

Heritage Reporting Corporation
(202) 628-4888

1 Q. What is your role in this current lawsuit
2 between MRI and Samsung?

3 A. Well, after reviewing three of the Samsung
4 products, their OH85, 46, and 55, it became pretty clear
5 that they were infringing on our technology. I contacted
6 the Standley Law Group, who has been our patent attorney
7 since, I believe, 1993, and asked that they put Samsung on
8 notice.

9 Q. Mr. Dunn, what does MRI do as a company?

10 A. We design, fabricate, assemble, manufacture, and
11 support globally generally what's called outdoor LCD
12 displays or digital out-of-home displays.

13 Q. In what ways has MRI contributed to the market
14 that you just described?

15 A. Well, certainly, our cooling technology has been
16 the key to our success. We are known worldwide as having
17 the highest performance, most long-lived, most robust
18 products, and that's just not an idle statement. We are
19 the dominant supplier to all of the major digital
20 out-of-home advertising companies in the world, JCDecaux,
21 Clear Channel, Outfront, et cetera.

22 Q. Mr. Dunn, you have three binders. There's one
23 that's a little bit thicker than the rest. Can you take a
24 look at that bigger binder and, in particular, let me know
25 if you see the tabs JX-001 all the way to 005.

1 A. I do.

2 Q. Within those tabs, are those the five MRI
3 patents that are asserted in this investigation?

4 A. Yes, they are.

5 Q. Are you a named inventor on every one of those
6 patents?

7 A. I am.

8 Q. Mr. Dunn, let's take a step back. Where did you
9 go to college?

10 A. Georgia Institute of Technology.

11 Q. What did you study while you were there?

12 A. A Bachelor of Science in electrical engineering
13 and a minor in physics.

14 Q. I said I wanted to take a step back. Now I want
15 to take a big step forward and ask you some questions about
16 a few companies that you worked at before starting MRI.

17 What is Avionic Displays Corporation?

18 A. That is a company that myself and three other
19 equal partners started in 1991 to engineer, design, and
20 manufacture electronic flight guidance instrumentation for
21 aircraft using LCD technology.

22 Q. What type of physical environment did the
23 products made by Avionic Displays live in?

24 A. Honestly, the most demanding, harshest in the
25 world. We were doing cargo transport aircraft, fighter

Heritage Reporting Corporation
(202) 628-4888

1 jets, Apache helicopter, and M1A2 Abrams tank, Bradley
2 fighting vehicle, virtually every aircraft that landed and
3 took off of aircraft carriers. So the shock, vibration,
4 temperature extremes, the salt fog, the explosive
5 decompression, the explosive atmosphere, gun butt boot
6 kick, track slap gunfire, you name it, the displays had to
7 endure that.

8 Q. What was your role at that company?

9 A. Again, I started that from scratch. There was
10 myself and three other gentlemen. I was the president and
11 CEO, but I also did the mechanical and optical engineering
12 for the company, another gentleman did the electrical
13 design, the third one did software, and the fourth pretty
14 much was our business administrator.

15 MR. MACHLEIDT: Your Honor, may I ask in terms
16 of just microphones, can you hear everything just fine?

17 JUDGE BHATTACHARYYA: Yes, I can hear well.

18 BY MR. MACHLEIDT:

19 Q. Mr. Dunn, can you lean forward just a smidge? I
20 don't know where the microphone is for you.

21 A. I'm trying not to cover the microphone with the
22 notebook.

23 Q. Thank you, Mr. Dunn.

24 What did you do after working at Avionic
25 Displays?

1 A. Well, in 1998, we were trying to grow the
2 business and also get into a situation where we could buy a
3 higher volume of LCD displays. We had formed a
4 relationship with LG -- at the time, they were called LG
5 LCD -- out of Seoul, South Korea, to design and provide
6 custom displays for Avionic Displays Corporation. Being a
7 consumer electronics oriented company, they were pushing us
8 to buy higher volumes, so we created another company,
9 American Panel Corporation, or APC, in the middle of, say,
10 the second half of 1998, that became a display module
11 component manufacturer selling not only to ADC but also
12 many of ADC's competitors, still in the primarily military
13 aviation/ground vehicle, ultimately getting into commercial
14 aviation as well.

15 Q. What was your title at American Panel
16 Corporation?

17 A. I was also the president and CEO of that
18 company.

19 Q. Briefly, because I know you covered some of it,
20 what type of work did you do at that company?

21 A. Well, at that time, initially primarily did the
22 marketing. We had grown ADC to a fairly sizeable number.
23 I think at that time at ADC we had well over 100 employees.
24 So when APC was launched, my main role was going out and
25 developing business.

1 Q. Mr. Dunn, moving forward, when did you start --
2 or remind us when you started MRI?

3 A. I incorporated MRI in December 2004. And we
4 fielded our first product in February 2006.

5 Q. What type of work did you want to do at MRI?

6 A. Well, much like ADC and APC, we had pretty much
7 saturated the market by the 2004 time frame, and at APC I
8 was looking to get into other verticals or other commercial
9 opportunities. I was looking for something that did not
10 involve military contracts and felt that outdoor signage
11 was the way to go. So we actually launched gasoline
12 pump-top displays to be put on the top of gasoline
13 dispensers at convenience stores at APC. And then,
14 ultimately, that became the first product at MRI.

15 Q. Was cooling the outdoor products an issue you
16 faced at MRI?

17 A. Oh, absolutely.

18 Q. In the early days, what were some of the ways
19 that you were aware of people trying to keep these displays
20 cool?

21 A. Well, you've got to remember, back in that
22 period of time, the outdoor LCD industry was very immature,
23 very green. There weren't a lot of players in the space.
24 It was a very tough environment. Display sizes were
25 somewhat limited.

Heritage Reporting Corporation
(202) 628-4888

1 So air-conditioning seemed to be the direction
2 our other competitors were going. I felt from the very
3 beginning that air-conditioning was not the way to go.
4 Contained freon, which is not environmentally friendly.
5 We've always tried to minimize the carbon footprint of our
6 products. We wanted to have something that was economical,
7 something that wouldn't condense, something that wouldn't
8 consume a lot of power.

9 So air-conditioning was not something that was
10 on the radar to take a look at. So we began using ambient
11 air to cool the products.

12 Q. Mr. Dunn, you have three binders, and I think
13 the bigger one is alphanumeric. Can you take a look at
14 that and look, in particular, at the tab CX-1105C?

15 A. CX-1105C. Yes, I have that.

16 Q. Are you familiar with what's located at that
17 tab?

18 A. Yes, I am.

19 Q. What is it?

20 A. Well, that's a photograph of our MRI, or
21 Manufacturing Resource International, headquarters, what we
22 call plant 2. We've actually sold plant 1. But it's a
23 220,000-square-foot design, fabrication, assembly, and
24 support center based in Alpharetta, Georgia.

25 JUDGE BHATTACHARYYA: Mr. Machleidt, would it be

1 possible to show the photo on the screen?

2 MR. MACHLEIDT: I was just moving to that. And
3 actually --

4 JUDGE BHATTACHARYYA: Okay. Okay.

5 MR. MACHLEIDT: No, this is perfect. We tried
6 to carve it up as much as we could, but I believe now we're
7 going go into a mix of confidential information. So before
8 putting things on the screen, I think we'd like to go on
9 the confidential record, put the blinds down, and
10 unfortunately kick some folks out.

11 JUDGE BHATTACHARYYA: All right. Which
12 confidential record are we going onto, or is it all
13 parties' confidential?

14 MR. MACHLEIDT: This is MRI confidential
15 information. Mr. Dunn will not be discussing Samsung
16 confidential information.

17 JUDGE BHATTACHARYYA: Then let's move now to the
18 MRI confidential record.

19 MR. MACHLEIDT: Yes, please.

20 JUDGE BHATTACHARYYA: And all persons not
21 authorized to see MRI confidential information should leave
22 the room.

23 (Whereupon, the hearing proceeded in
24 confidential session.)

25

1 O P E N S E S S I O N

2 MR. KLINE: If I could, Your Honor, could I hand
3 some things to the witness?

4 JUDGE BHATTACHARYYA: Yes, please. Proceed.

5 THE WITNESS: Mr. Kline, am I going to need
6 these any longer?

7 MR. KLINE: No.

8 THE WITNESS: Okay. I will set them aside here.

9 MR. KLINE: Your Honor, you mentioned the Court
10 doesn't need the big binders; is that correct?

11 JUDGE BHATTACHARYYA: Correct.

12 MR. KLINE: Thank you. Would that include
13 deposition transcripts that might be used for impeachment?
14 You don't need those either?

15 JUDGE BHATTACHARYYA: I don't need those either.

16 MR. KLINE: Okay. Very good. Thank you, Your
17 Honor.

18 CROSS-EXAMINATION

19 BY MR. KLINE:

20 Q. Good afternoon, Mr. Dunn.

21 A. Good afternoon.

22 Q. You started American Panel Corporation in 1998,
23 correct?

24 A. That is correct.

25 Q. And you sold it on the day that you created it,

Heritage Reporting Corporation
(202) 628-4888

1 right?

2 A. That is correct.

3 Q. And then you reacquired American Panel

4 Corporation in 2007, right?

5 A. That is correct.

6 Q. And American Panel no longer exists, right?

7 A. I sold American Panel in September 2019 to a

8 company named Mercury Systems.

9 Q. Between its founding and the time that you sold
10 it, American Panel was a component supplier for flat panel
11 displays, right?

12 A. Correct.

13 Q. And that was for the aircraft and rugged ground
14 vehicles, right?

15 A. Yes.

16 Q. And American Panel made flat panel LCD displays
17 with backlights, right?

18 A. Yes.

19 Q. And American Panel's displays ranged in size
20 from about 3 inches to about 22 inches, right?

21 A. That is correct.

22 Q. Then you founded the Complainant here --

23 A. Excuse me. Until we got into the pump-top
24 displays at American Panel, which were 26- and 32-inch.

25 Q. You founded Complainant, MRI, in about 2004,

Heritage Reporting Corporation
(202) 628-4888

1 right?

2 A. Correct.

3 Q. And you didn't really consider any markets at
4 that time, other than digital signage, right?

5 A. That's correct.

6 Q. When you --

7 MR. MACHLEIDT: Not an objection, but I think I
8 am experiencing what some of the audience has done.

9 Mr. Dunn, if you could lean forward a little bit. Thank
10 you so much.

11 THE WITNESS: Thank you.

12 BY MR. KLINE:

13 Q. When you founded MRI in 2004, you were the only
14 officer, right?

15 A. That's correct.

16 Q. But MRI did not begin to conduct actual business
17 activities until January of 2006, right?

18 A. That's correct.

19 Q. It was dormant up until then, right?

20 A. Correct.

21 Q. As of December of 2007, you owned about
22 90 percent of APC, right?

23 A. Correct.

24 Q. And you also owned about 90 percent of MRI at
25 that time, right?

Heritage Reporting Corporation
(202) 628-4888

- 1 A. Correct.
- 2 Q. And MRI and APC shared resources, right?
- 3 A. Yes.
- 4 Q. Now, you did not invent back-lit LCD displays,
5 right?
- 6 A. No.
- 7 Q. Back-lit LCD displays were in the industry long
8 before MRI existed, right?
- 9 A. Yes.
- 10 Q. And you were not the first person to think of
11 cooling LED backlight LCD displays, right?
- 12 A. No.
- 13 Q. Before you built your first MRI prototype,
14 others had cooled LED back-lit LCD displays by bringing
15 ambient air outside -- from outside, into the product, and
16 circulating it over heat sinks, correct?
- 17 A. Possibly.
- 18 Q. And fair to call that ambient cooling?
- 19 A. Yes.
- 20 Q. So ambient air open loop cooling for LED
21 back-lit LCD panels was known before you built your first
22 prototype, correct?
- 23 A. Likely, yes, but the environment has a lot to do
24 with LCD --
- 25 Q. That was my question, thank you. Thank you.

Heritage Reporting Corporation
(202) 628-4888

1 Now let's talk about the Outdoor Promotions
2 project that you testified about on direct.

3 MRI -- you testified, I believe, that MRI began
4 pursuing the Outdoor Promotions project in 2007; is that
5 right?

6 A. That would be correct, yes.

7 Q. I believe you mentioned Mr. Parsons was an MRI
8 marketing person, he brought the Las Vegas bus shelter
9 opportunity to your attention; is that right?

10 A. Yes.

11 Q. We couldn't find; do you have any documents
12 between MRI and Outdoor Promotions from the year 2007?

13 A. We have turned over everything we could find.

14 Q. Now, I understand that in 2007, you traveled to
15 Las Vegas to demonstrate what I think you called the 2010
16 product to Gary Young at Outdoor Promotions; is that right?

17 A. That's correct.

18 Q. And sometimes we see that 2010 product referred
19 to as 20.1, correct?

20 A. One in the same.

21 Q. Right. But you don't remember what month that
22 was in 2007; is that right?

23 A. It was certainly after my October trip, because
24 I discussed with Gary Young the air-to-air intercooler and
25 that concept that I called --

1 Q. I'm sorry, I can't hear you. If you wouldn't
2 mind --

3 A. I'm sorry. I said it was after the first week
4 of October of 2006, because that's when I called Jeff
5 Stanley from Korea to talk to him about my new harebrained
6 idea that I called the air-to-air intercooler. And we
7 definitely discussed that with Mr. Gary Young at the
8 meeting in his office in November.

9 Q. You said, I believe, unless I misheard you, 2006
10 in your previous answer. I suspect you meant to say 2007?

11 A. 2007, yes.

12 Q. Right.

13 But at the time that you demonstrated your
14 20.1-inch display for Outdoor Promotions in Las Vegas, you
15 had not yet given Outdoor Promotions any proposal, correct?

16 A. We had -- that was the very first meeting. We
17 had not provided a proposal.

18 Q. So if you could for me, please, in your binder,
19 let's turn to CX-074C.

20 Do you have that before you?

21 A. Yes, I do.

22 Q. I have to apologize, I think from time to time
23 we have documents with different stickers on them. So I
24 have my documents the way I have them, and hopefully we can
25 figure that out and economize later.

1 Now, this is a letter that Gary Young at Outdoor
2 Promotions -- to Gary Young at Outdoor Promotions from
3 Mr. Peterson at MRI, correct?

4 A. Yes.

5 Q. Could you put that up, please? I'm sorry,
6 Mr. Smith, if you could put that up. Thank you.

7 So this letter is dated January 2nd of 2008,
8 correct?

9 A. Yes, it is.

10 Q. And if we turn to the third page of CX-074C, it
11 ends in the 003. Do you see that?

12 A. I'm sorry, can you repeat that?

13 Q. Certainly. The third page of the document.

14 A. Yes.

15 Q. Do you have that before you?

16 A. Yes, I do.

17 Q. It is on the screen as well.

18 You were cc'd on this, correct?

19 A. Yes.

20 Q. As was Darryl Parsons, right?

21 A. Correct.

22 Q. And Ms. Rivard signed it on behalf of
23 Mr. Peterson, correct?

24 A. Yes.

25 Q. Those were all MRI employees at the time, right?

Heritage Reporting Corporation
(202) 628-4888

1 A. Marsha Rivard likely was an APC employee, but,
2 again, in our shared services, was acting in the role of
3 MRI.

4 Q. Did you read the letter before Mr. Peterson sent
5 it?

6 A. I did.

7 Q. Did you approve it?

8 A. I did.

9 Q. So Mr. Peterson wrote, with your approval, "Dear
10 Mr. Young, in response to your request."

11 Do you see that?

12 A. Yes.

13 Q. And he says, "MRI is pleased to provide herein a
14 firm fixed price proposal," correct?

15 A. A revised firm fixed price proposal.

16 Q. Thank you. A revised firm fixed price proposal,
17 correct?

18 A. Yes.

19 Q. If we turn to the fourth paragraph of this
20 letter that Mr. Peterson sent to Outdoor Promotions with
21 your approval, Mr. Peterson wrote, "It is understood that
22 the MRI-provided components shall be mounted within the
23 Vertigo air-conditioned enclosure."

24 Do you see that?

25 A. Yes.

Heritage Reporting Corporation
(202) 628-4888

1 Q. So you were collaborating with Vertigo to meet
2 this RFP, right?

3 A. Yes.

4 Q. Mr. Peterson went on to say that that mounting
5 would be done by brackets that would be co-designed by MRI
6 and Vertigo, and they would be manufactured by Vertigo,
7 correct?

8 A. Yes.

9 Q. So MRI told Outdoor Promotions that's how the
10 brackets would get designed and built, right? Correct?

11 A. It only makes sense. The display portion was
12 ours. The enclosure was theirs. We had to mate the
13 display to the enclosure.

14 Q. I understand that.

15 And Mr. Peterson went on to tell Mr. Young, with
16 your approval, that "MRI will also co-design with Vertigo
17 any ducts, baffles, and/or fans that shall be required to
18 ensure adequate cooling of both the rear of the LCD module
19 as well as the face of the LCD."

20 Did I read that correctly?

21 A. Yes.

22 Q. So that is what MRI told Outdoor Promotions,
23 that was the way that MRI and Vertigo were going to
24 collaborate to build the prototype, correct?

25 A. That is correct. At that time Vertigo was a

1 fabricator. We were not.

2 Q. Pardon me. That was my question. Thank you.

3 A. All right.

4 Q. So you did not personally know Mr. Bolton prior
5 to the Outdoor Promotions Las Vegas project, right?

6 A. I did not.

7 Q. Pardon me. Do you have enough water?

8 A. I'm good.

9 Q. Okay. The first time that you met Chris Bolton
10 face-to-face was at MRI in Alpharetta on December 19th of
11 2007, right?

12 A. I believe that's true, yes.

13 Q. And it was at that face-to-face meeting on
14 December 19th of 2007 that MRI and Vertigo signed the
15 nondisclosure agreement, correct?

16 A. That's correct.

17 Q. And if we could turn to RX-0443.

18 A. I'm sorry, say that number again, please?

19 Q. RX-0443C. Do you have that?

20 A. I do.

21 Q. And if we turn to the page that ends in the
22 Bates Number 4 of the document, we will see some
23 signatures. And I think your counsel pointed this out as
24 well, but I think this may be a different version -- copy
25 of the same document.

1 Do you have that?

2 A. I do, yes.

3 Q. So we see that's Mr. Peterson's signature on
4 behalf of MRI, correct?

5 A. Yes.

6 Q. And do you recognize that as Mr. Bolton's
7 signature on behalf of Vertigo?

8 A. Yes.

9 Q. Right. So if we could turn to the first
10 provision on the first page, paragraph number 1.

11 Do you see that?

12 A. Yes.

13 Q. So that provides that "The parties shall not
14 disclose to others, or use for their own benefit or
15 otherwise appropriate, copy, or otherwise reproduce or make
16 notes of, any trade secrets, confidential information, or
17 other information (other than that which is public
18 knowledge) disclosed by the other party in connection with
19 the parties' business relationship."

20 Do you see that?

21 A. Yes.

22 Q. Did you read that at the time?

23 A. Yes.

24 Q. Did you understand that -- was it your
25 understanding that MRI was agreeing not to disclose to

Heritage Reporting Corporation
(202) 628-4888

1 others Vertigo's confidential information?

2 A. Yes.

3 Q. Was it your -- thank you.

4 You can take that down, Mr. Smith. Thank you.

5 Now, you testified that the first contact
6 between Samsung and -- strike that.

7 The first contact between Samsung and APC or MRI
8 was in September of 2007; isn't that right?

9 A. I believe that's correct.

10 Q. The reason you made contact with Samsung in 2007
11 was that Samsung was the only company in the world, at the
12 time, making or planning to make a display of 70 inches or
13 greater, correct?

14 A. That's correct.

15 Q. And you knew by November or December time frame
16 that you were going to need a 70-inch display for the
17 Outdoor Promotions project, correct?

18 A. Well, we didn't know at that time. We certainly
19 are aware of the opportunity. And before we were going to
20 pursue the opportunity, we need to understand availability
21 of product.

22 Q. And you were trying to identify whether a
23 70-inch display would be available so that MRI and Vertigo
24 could pursue that opportunity, correct?

25 A. Well, we were trying to understand if that

Heritage Reporting Corporation
(202) 628-4888

1 product would be available for MRI. We didn't even know
2 Vertigo back then.

3 Q. Fair enough.

4 But, in any event, you began in the 2007 -- late
5 2007 time frame gathering information about whether you
6 could buy a 70-inch LCD from Samsung, correct?

7 A. Yes.

8 Q. You had no previous relationship with Samsung
9 before September of 2007, right?

10 A. Actually, I did. In 1994/'95, as
11 owner/president of APC, I traveled the world looking for a
12 partner to do custom LCDs for APC. So APC, in the military
13 avionics business, ultimately commercial avionics, we
14 needed custom LCDs. Commercially available would not meet
15 the requirement.

16 So Samsung is one of the companies that I met
17 with at that time frame and tried to establish a
18 relationship with.

19 Q. In the 2007 time frame, nevertheless, it was an
20 APC employee, Mr. Juho Chong -- if I am pronouncing that
21 correctly -- who first contacted Samsung in 2007; isn't
22 that right?

23 A. I believe that is, yes.

24 Q. He was never an MRI employee, though, correct?

25 A. It all blends together over the years. I can't

1 say whether he ever was or wasn't. I don't think he ever
2 was, but I'm not certain on that.

3 Q. If you could turn to CX-2415C in your binder,
4 please.

5 Do you recognize this document?

6 A. I saw it, I believe -- well, this one is just
7 signed by Marsha Rivard. So I have seen either this or
8 something similar to this before, yes.

9 Q. So you recognize this to be a nondisclosure
10 agreement between Samsung Semiconductor and American Panel,
11 correct?

12 A. It is.

13 Q. As you mentioned, this version was signed by --
14 if we could come out, Mr. Smith -- by Marsha Rivard, right?

15 A. Yes.

16 Q. And I believe she was doing contracts at the
17 time for both MRI and APC?

18 A. Correct, yes.

19 Q. And that's because MRI and APC were sharing
20 resources, correct?

21 A. Yes.

22 Q. But you understand now that this NDA should have
23 been executed on behalf of MRI, not APC, correct?

24 A. Well, actually, I don't think so. So after the
25 last deposition, where you grilled me on this --

Heritage Reporting Corporation
(202) 628-4888

1 Q. Well, is your testimony you don't think so?

2 MR. MACHLEIDT: Can he finish his answer?

3 MR. KLINE: He finished his answer, and now he
4 is offering a narrative, Your Honor.

5 MR. MACHLEIDT: He is answering the question.

6 JUDGE BHATTACHARYYA: Mr. Kline, you can ask him
7 to provide a "yes," "no," or "I don't know" answer.

8 MR. KLINE: Thank you very much, Your Honor.

9 JUDGE BHATTACHARYYA: And if there is redirect
10 on that point -- if the answer is "I don't know," then you
11 may do that on redirect.

12 MR. MACHLEIDT: Thank you, Your Honor.

13 MR. KLINE: Fair enough. Thank you, Your Honor.

14 THE WITNESS: Mr. Kline, can you repeat the
15 question?

16 BY MR. KLINE:

17 Q. I'm going to, yeah. I was trying to get it
18 straight.

19 A. All right.

20 Q. Ms. Rivard was manager of contracts, right?

21 A. That's what it says here on the paper, yes.

22 Q. Did she do that for MRI and for APC?

23 A. She did.

24 Q. You owned both MRI and APC in December of 2007,
25 right?

1 A. In which time frame again, please?

2 Q. December of 2007.

3 A. Yes.

4 Q. Right. And it was at least at one time your
5 belief that this contract should never have been executed
6 as American Panel, it should have been MRI; isn't that
7 correct?

8 A. At the time of my last deposition, yes.

9 Q. Thank you.

10 And you mentioned that time frame. Do you
11 recall that was October of 2018, your prior deposition? A
12 prior deposition?

13 A. On the CIVIQ case?

14 Q. Yes, right.

15 A. I don't have that exact date, so I can't confirm
16 or deny it.

17 Q. All right. Do you recall contending at some
18 point that APC had no obligation to comply with the terms
19 of this nondisclosure agreement?

20 A. What I said in both depositions, all I had been
21 presented with at that point in time was an NDA that had
22 only been signed by one party. I never saw an NDA signed
23 by both parties.

24 Q. Thank you. That was not my question.

25 Do you recall contending that APC had no

Heritage Reporting Corporation
(202) 628-4888

1 obligation to comply with the terms of this agreement?

2 A. Say that again, please?

3 Q. Do you recall being of a mind that APC had no
4 obligation to comply with the terms of this agreement?

5 A. I recall stating that if the agreement was not
6 fully executed, we were under no obligation.

7 Q. I really have to ask you to speak into the
8 microphone.

9 A. So I recall saying that if it was not fully
10 executed, we were not under an obligation. It was not a
11 binding contract if it was not executed.

12 Q. Now, if we could turn to JX-0306, please. It
13 should be in your binder.

14 Do you have that before you, Mr. Dunn?

15 A. Yes, I do.

16 Q. Do you recognize the document?

17 A. It's the same document, fully executed.

18 Q. Right. When did you first see the version
19 executed by Samsung Semiconductor on December 20th of 2007,
20 if ever?

21 A. Certainly subsequent to my last deposition.

22 Q. Had you ever seen it before your last
23 deposition, or one of your last depositions?

24 A. To the best of my knowledge, no.

25 Q. Were you surprised that you had never seen it

Heritage Reporting Corporation
(202) 628-4888

1 before?

2 A. No. I wouldn't necessarily get a copy of this.

3 Q. Seeing -- do you recognize this to be -- did --
4 well, strike that.

5 At the time that you were deposed, and you say
6 you hadn't seen a copy including Samsung's signature, it
7 was your view that you had no obligation to comply, isn't
8 it -- wasn't it?

9 A. If it's not an executed document, it is not a
10 contract. Then there is no obligation.

11 Q. You were not aware of it being fully executed;
12 isn't that correct?

13 A. I was not at that time.

14 Q. So you were not aware of MRI or APC having an
15 obligation to comply; isn't that correct?

16 A. I was not.

17 Q. Now, if we could look at JX-110C, please.
18 Do you recognize this document?

19 A. I do, yes.

20 Q. This is an e-mail that Bill Elliott at Samsung
21 sent to you on January 16th of 2008, isn't it?

22 A. Bruce Elliott, yes.

23 Q. Thank you. Bruce Elliott.

24 And you met with Samsung in Las Vegas early in
25 January of 2008; isn't that right?

1 A. Yes.

2 Q. And at that meeting your main focus was on
3 discussing Samsung's 70-inch display; isn't that right?

4 A. We were discussing both 70 and 82.

5 Q. All right. And following that, MRI purchased
6 and received a quantity of Samsung 70-inch display panels,
7 correct?

8 A. That's correct.

9 Q. And in connection with that purchase, you also
10 received technical drawings for the 70-inch display panel
11 from Samsung; isn't that correct?

12 A. If I recall, we actually received them earlier
13 than that, as well as subsequent to that.

14 Q. And if we turn ahead in this document to page 2.
15 Perhaps the next page.

16 Let's go forward again, please, Mr. Smith.

17 Here we go. Do you recognize this document?
18 Mr. Dunn?

19 A. I probably have seen it.

20 Q. If we could turn to page 15, JX-0110C, page 15.
21 This is a technical notification for the Samsung display
22 model LTI700HD01-001. Isn't that correct?

23 A. Yes.

24 Q. You see it bears the confidential legend in the
25 upper right-hand corner?

1 A. This document has it, but I have a very similar
2 document that is not marked.

3 Q. I'm sorry, I don't know if I heard your answer.

4 You see the confidential legend --

5 A. Yes, I see the confidential, but I know we --

6 Q. Thank you.

7 A. -- have documents that aren't marked with the
8 same information.

9 Q. If you could turn to page 17 of this document.

10 A. Yes.

11 Q. Do you recognize the images on the right to show
12 support bracket position -- no, if we could come back,
13 Mr. Smith, thank you.

14 Do you recognize these pages -- this page?

15 A. Vaguely, yes.

16 Q. What is it?

17 A. It's a rear view of the Samsung 70-inch.

18 Q. Right. Now, MRI received three-dimensional CAD
19 drawings from Samsung for the 70-inch Samsung display
20 panel; isn't that correct?

21 A. Yes.

22 Q. And MRI integrated those CAD drawings for the
23 Samsung 70-inch display panel into MRI's CAD drawings;
24 isn't that right?

25 A. That was the purpose of receiving them. So we

1 took the pieces that applied to how we were going to
2 implement their product into the Outdoor Promotions 70-inch
3 wedge.

4 Q. And MRI used Samsung's CAD drawings for what
5 became Figures 1 and 2 of the '595 patent; isn't that
6 correct?

7 A. Can we see that?

8 Q. Sure.

9 Can we call that up, please? I believe JX-1.
10 Thank you.

11 That's Figure 1. Do you recognize that?

12 A. Yes, I do.

13 Q. Do you see Figure 2? Do you recognize that?

14 A. Yes, I do.

15 Q. Those figures came, other than the reference
16 numerals, from Samsung's CAD files; isn't that correct?

17 A. I honestly can't say. They look very similar.
18 I can't tell if they are CAD or just copies.

19 Q. Just copies of Samsung drawings?

20 A. Copies of a drawing. I mean, it's the Samsung
21 70-inch. There is no debate or argument over that.

22 Q. Okay.

23 A. It is Samsung 70-inch.

24 Q. Thank you.

25 I would like to turn to Joint Exhibit 062C,

1 please.

2 A. Can you give me that number again?

3 Q. It is JX-0062C.

4 A. I have it.

5 Q. This appears to be, at its top, an e-mail from
6 you to Hoke Mann at APC. Do you see that?

7 A. Yes.

8 Q. And it's dated July 3rd of 2008 -- no, it isn't.
9 It's dated March 4th of 2008, correct?

10 A. Yes.

11 Q. Now, on your direct examination there was a
12 version of this e-mail that you were shown a week later,
13 forwarding it to Ware Bedell. Do you recall that?

14 A. I can't say that I do or don't.

15 Q. Could we have as well, Mr. Smith, JX-0039C.

16 A. I don't seem to have that in this binder.

17 Q. So JX-0039C is shown on the right. And you were
18 asked questions about this on your direct examination.

19 A. Okay.

20 Q. Do you see that?

21 A. Yes.

22 Q. And it is an e-mail that you sent to Ware Bedell
23 on March 11 of 2008; isn't that right?

24 A. Yes.

25 Q. And in both of these e-mails, JX-0062 and

Heritage Reporting Corporation
(202) 628-4888

1 JX-0039, you were forwarding to others at APC an e-mail
2 that you received from Chris Bolton, correct?

3 A. Yes.

4 Q. You sent Chris Bolton's March 4th e-mail to Hoke
5 Mann on the day you received it, right?

6 A. Yes.

7 Q. And then you sent it again to Ware Bedell a week
8 later; isn't that right?

9 A. Yes.

10 Q. How many people did you send this to?

11 A. As far as I can tell, these two.

12 Q. Let's focus on 0062, please. And we're going to
13 focus on the e-mail that you were forwarding, correct?

14 Do you see that?

15 A. Yes.

16 Q. Now, you don't have a copy of Mr. Dunn's March
17 4th, 2008 e-mail anymore because your computer crashed,
18 right?

19 A. That's correct.

20 Q. So I assume we're fortunate enough to have this
21 because you forwarded it, and we got it from the recipient
22 of the forwarded e-mail. Is that what you expect as well?

23 A. Most likely, yes.

24 Q. Thank you.

25 But you do recall receiving this on March 4th of

1 2008, right?

2 A. Yes.

3 Q. And you also recall that that is the day after a
4 patent application naming you as the sole inventor was
5 filed on your and/or MRI's behalf, correct?

6 A. Yes.

7 Q. All right. Now, if we could look at JX-0065C.
8 Maybe we could keep the e-mail up at the same time.

9 You recognize that as one of the attachments
10 with Chris Bolton's March 4th e-mail, correct?

11 A. Yes.

12 Q. And this was the first time you had seen that
13 CAD rendering, correct?

14 A. CAD rendering, to the best of my knowledge, yes.

15 Q. Yes, okay.

16 And if we come to Mr. Bolton's e-mail, notice
17 that the subject is "Alternative 70-inch LCD displays."

18 Do you see that?

19 A. Yes.

20 Q. And he writes to you, "I never got chance to
21 discuss my thoughts for a dedicated 70-inch LCD enclosure
22 system last week."

23 Do you see that?

24 A. Yes.

25 Q. So you understand Mr. Bolton's e-mail to be

1 referring to a discussion that you and he had had the week
2 before March 4th of 2008, correct?

3 A. I can only draw that from reference. I don't
4 recall the meeting or the place, because Digital Signage
5 Expo in Las Vegas was taking place at the end of -- I guess
6 it was the end of February.

7 Q. Right. That was the Digital Signage Expo of
8 2008 --

9 A. Right.

10 Q. -- which took place at the Las Vegas Convention
11 Center the last week of February in 2008, correct?

12 A. Correct.

13 Q. And you attended that, right?

14 A. Yes.

15 Q. And Chris Bolton attended that, correct?

16 A. I do not recall.

17 Q. Okay. You had a booth at that, correct?

18 A. We did.

19 Q. So are you going to tell me that you don't
20 recall whether Vertigo had a booth at that?

21 A. I do not recall Vertigo having a booth.

22 Q. Do you recall talking with Mr. Bolton at the
23 Las Vegas-hosted 2008 DSC Expo?

24 A. I do not recall a conversation with him. And I
25 cannot find him in any photographs we have of that event.

1 Q. Mr. Bolton went on to say -- let me ask it this
2 way: Can you deny that you had a meeting -- that you
3 talked with Chris Bolton at the 2008 DSC Expo that took
4 place the last week of February in 2008?

5 A. I cannot.

6 Q. So Chris went on to write to you, "I see this as
7 a separate development from Las Vegas, which is specific in
8 its configuration to the OP shelter layout."

9 Do you see that?

10 A. Yes.

11 Q. And you understood Mr. Bolton there to be using
12 the initials "OP" to refer to Outdoor Promotions, correct?

13 A. Yes.

14 Q. And Mr. Dunn [sic] went on to write, "I have
15 attached some information to prime your thought process."

16 A. I think you mean Mr. Bolton.

17 Q. I'm sorry. Thank you.

18 A. Thank you.

19 Q. Mr. Bolton wrote to you, "I have attached some
20 information to prime your thought process." Correct?

21 A. Yes.

22 Q. And your reaction when you received this e-mail
23 was, this is nice, wasn't it?

24 A. I wouldn't say that I thought it was nice. It
25 is a pretty picture.

1 Q. Okay. Do you recall -- you have mentioned your
2 deposition. Do you recall I took your deposition -- I have
3 taken it a few times, correct?

4 A. Yes.

5 Q. And do you recall at one of those times I asked
6 you the question:

7 "Question: So you don't recall having any
8 reaction one way or the other to reading Chris's March 4th,
9 2000 e-mail when you received it?"

10 Do you recall that?

11 A. I can't say I had a strong reaction.

12 Q. Okay. So if you could look --

13 MR. MACHLEIDT: I object to this as improper
14 impeachment.

15 MR. KLINE: I haven't started the impeachment.

16 MR. MACHLEIDT: You're reading from his
17 transcript. I object to this as improper impeachment.

18 BY MR. KLINE:

19 Q. Let's take a look at the transcript. You have
20 it in the folder to your right. It's to your right, yes.
21 It is from the CIVIQ transcripts, which are the earlier
22 two.

23 JUDGE BHATTACHARYYA: I'm sorry, let's finish
24 this objection. Are you -- do you want me to strike
25 anything, or what --

1 MR. MACHLEIDT: He is not -- yes, Your Honor.
2 He is not laying the proper foundation for an impeachment.
3 He is just reading from the transcript and asking the
4 witness about the transcript. That is not impeachment.

5 MR. KLINE: My question was: I asked whether he
6 remembered being asked that question. I asked him if he
7 remembered being asked that question.

8 JUDGE BHATTACHARYYA: The objection is
9 overruled.

10 MR. KLINE: Thank you.

11 BY MR. KLINE:

12 Q. Do you have -- if you could turn to page 256,
13 please. It is CIVIQ Volume 1.

14 A. Volume 2. Volume 2. Everything I have in this
15 folder says Volume 2.

16 Q. You should have four volumes. I see one left in
17 the folder.

18 A. But these three all say Volume 2, as does this
19 one. So I have got four copies of Volume 2.

20 MR. KLINE: I might need the lunch break, Your
21 Honor, while I straighten this out, if that is okay with
22 you. I do apologize for that.

23 JUDGE BHATTACHARYYA: That is fine. We are at a
24 good time for lunch.

25 Mr. Machleidt, you are standing up. Is there --

1 MR. MACHLEIDT: I was just waiting to get copies
2 of the transcripts. It sounds like we may need to rejigger
3 that during the break.

4 MR. KLINE: I think we have a collating issue,
5 Your Honor, which I will straighten out right away.

6 JUDGE BHATTACHARYYA: We will break for lunch
7 and we're in recess for one hour.

8 (Whereupon, at 12:51 p.m., a lunch recess was
9 taken.)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 A F T E R N O O N S E S S I O N

2 (1:53 p.m.)

3 JUDGE BHATTACHARYYA: Please be seated.

4 We are on the public record. Is that correct?

5 MR. KLINE: That's correct. Thank you. All
6 set, Your Honor?

7 JUDGE BHATTACHARYYA: Yes.

8 MR. KLINE: Thank you very much.

9 BY MR. KLINE:

10 Q. Welcome back, Mr. Dunn.

11 I think, to your right, now you should have four
12 bound volumes, one for each of the four deposition days
13 you've sat for in the last few years. And I had asked you
14 before the break -- I'll just ask the question again. You
15 don't recall having any reaction one way or the other to
16 having received Chris Bolton's March 4th, 2008 e-mail,
17 other than "this is nice"; isn't that correct?

18 A. Without seeing the transcript, I'm speculating.
19 That was 13 -- no, how many years ago was that? A lot of
20 years ago.

21 Q. So what I'm asking you, as you sit here, your
22 reaction when you received Chris Bolton's March 4th e-mail
23 was "this is nice"; isn't that correct?

24 A. Sitting here today, I can't recall.

25 Q. Now, you did not respond to Chris Bolton's March

Heritage Reporting Corporation
(202) 628-4888

1 4th e-mail. "What do you mean 'prime my thought process,
2 that's my idea,'" did you?

3 A. Again, I can't say for certain. Chris and I had
4 numerous phone calls. There may have been e-mails. But as
5 you stated earlier, I had a computer crash and lost my
6 e-mails.

7 Q. But as you sit here, my question is: When you
8 received Chris Bolton's March 4th e-mail, you did not
9 respond to him: "What do you mean, 'prime my thought
10 process,' that's my idea"?

11 A. Again, I can't say whether I did or didn't.

12 Q. I'm sorry --

13 A. I can't say whether I did or did not.

14 Q. If you could turn to volume 1 of the deposition
15 transcripts that you have at page 268. Do you see that?
16 Do you have that specific volume 1?

17 A. 268, yes.

18 Q. And I asked you the question, on page 268 at
19 line 5: "You didn't -- you didn't say to Chris, you didn't
20 respond to Chris 'what do you mean prime my thought
21 process? That's my idea.' Did you?"

22 Do you recall answering: "No"?

23 A. I don't recall answering "no" but the record
24 says I did.

25 Q. And you didn't go to Dave Williams.

1 Can we see Mr. Smith, the e-mail again? The one
2 we just had, I'm sorry. Thank you.

3 Mr. Williams received this e-mail as well,
4 correct? The one that we've marked?

5 A. Yes.

6 Q. Okay. And when you received that e-mail, you
7 did not go to Dave Williams and say: What's Chris talking
8 about, he just sent me a CAD rendering of my idea, but said
9 it was to prime my thought process? You never said that,
10 did you?

11 A. It says in the record here "no."

12 Q. I'm sorry. Are you looking at your deposition
13 transcript?

14 A. I am.

15 Q. I'd ask you not to do that.

16 A. Okay. I thought you asked me to do that.

17 Q. Well, the Court can explain this. I'm going to
18 ask you a question -- I'm just going to ask you these
19 questions, and if I feel as though there's a need to direct
20 your attention to the deposition, I'll do that.

21 JUDGE BHATTACHARYYA: Yeah, Mr. Dunn, don't look
22 at your deposition transcript unless --

23 THE WITNESS: Okay.

24 BY MR. KLINE:

25 Q. So my question is simply, when you received this

1 e-mail, you did not go to Dave Williams and say: What is
2 Chris talking about, he sent me this e-mail, a CAD
3 rendering of my idea, but he said it was to prime my
4 thought process? You never did that, did you?

5 A. Sitting here 15 years later, I can't
6 definitively say yes or no.

7 Q. Right. And the same thing we saw earlier, you
8 forwarded this to Ware Bedell a week later, March 11th of
9 2008. Do you recall that? We saw that e-mail on your
10 direct?

11 A. Yes.

12 Q. And you did not, when you forwarded it to Ware
13 Bedell, Ware Bedell, go to Ware and say: I got this crazy
14 e-mail from Chris Bolton, he's sending back to us our ideas
15 and telling us they're his ideas? You didn't do that
16 either, did you?

17 A. Again, 15 years after the fact, I can't
18 remember.

19 Q. If we could turn, please, to the '064
20 provisional patent application that MRI filed. That's
21 JX-0078. It's showing on the screen, Mr. Dunn, and you
22 have in your binder --

23 A. Yes.

24 Q. -- Joint Exhibit 0078. Do you recognize that
25 document?

1 A. Yes.

2 Q. And that is a certified copy of a provisional
3 patent application, correct?

4 A. Yes.

5 Q. And will you understand what I mean if I refer
6 to it as the '064 provisional patent application?

7 A. '064, yes.

8 Q. And MRI filed that on March 3rd of 2008,
9 correct?

10 A. Yes.

11 Q. And you were the only inventor named in
12 connection with that provisional patent application filing,
13 correct?

14 A. Yes.

15 Q. And we're probably going to bounce back and
16 forth a little, but I'd like to look at JX-0079. You
17 should have that on the screen before you. And it is in
18 your binder.

19 Do you see that, Mr. Dunn?

20 A. Yes.

21 Q. And that is also a certified copy of a
22 provisional patent application that MRI filed, correct?

23 A. Yes.

24 Q. And fair enough if I call that the '454
25 provisional?

Heritage Reporting Corporation
(202) 628-4888

1 A. Yes.

2 Q. Or I may refer to it as the March 26th, 2008
3 provisional because that is the date upon which MRI filed
4 it, correct?

5 A. Yes.

6 Q. Now, if we could turn to the figures of the '454
7 provisional that we've marked as JX-0079. And at page 33,
8 that's the Figure 9 we've been talking about today,
9 correct?

10 A. Yes.

11 Q. And that figure does not appear in the '064
12 provisional patent application, correct?

13 A. It does not.

14 Q. And, again, you filed the '064 provisional
15 patent application the day before -- the day before you
16 received Chris Bolton's March 4th e-mail, correct?

17 A. Yes.

18 Q. And MRI filed the March 26th provisional patent
19 application three weeks later, correct?

20 A. Yes.

21 Q. And that one includes Figure 9, right?

22 A. Yes.

23 Q. But the earlier one does not, correct?

24 A. Correct.

25 Q. Now, focusing on the '064 application, JX-0078,

Heritage Reporting Corporation
(202) 628-4888

1 may I ask, Mr. Dunn, when is the last time you reviewed
2 this application?

3 A. It has been a long time.

4 Q. The application does not use the term
5 "constricted convection"; do you agree?

6 A. I would have to read through it to see if it
7 does.

8 Q. I understand that, and I'd rather not take the
9 time. So do you want to tell me I'm wrong when I tell you
10 that the '064 application does not use the term
11 "constricted convection"?

12 A. I'll believe you.

13 Q. Yet, the '454 application does use the term
14 "constricted convection," doesn't it?

15 A. Again, I'd have to read through it to verify.

16 Q. When is the last time you looked at it,
17 Mr. Dunn?

18 A. It has been a long time.

19 Q. Well, maybe if we look at page that ends in
20 Bates Number 13 of JX-0079. There's the paragraph toward
21 the end of that page that begins "Figure 9 is a display 10
22 housing using the constriction convection cooling system 54
23 of the present invention." Do you see that?

24 A. Yes.

25 Q. Does that refresh your recollection that your

1 '454 application uses the term, at least "constriction
2 convection"?

3 A. As stated here in the application, yes.

4 Q. Now, I thought you testified on direct
5 examination that the system depicted in Figure 9 in the CAD
6 rendering that Mr. Bolton sent to you, that that was a dual
7 loop cooling system?

8 A. It appears to be.

9 Q. If we turn to page 13 of JX-0079, your '454
10 application --

11 A. Yes.

12 Q. Mr. Smith, could we have the next page, please.

13 And at the top, the application describes "the
14 exemplary embodiment shown in Figure 9 includes three
15 cooling loops."

16 Do you see that?

17 A. I'm sorry, where are you reading?

18 Q. The very first line on the page. Do you see
19 that?

20 A. I see that.

21 Q. Right. So a patent application was filed in
22 your name describing the exemplary embodiment shown in
23 Figure 9 as including three cooling loops, correct?

24 A. That's what it states.

25 Q. Fair enough.

1 Mr. Smith, if we could show this page on the
2 left and Figure 9 on the right.

3 So that is, though, Mr. Dunn, I assume you will
4 agree, a description of Figure 9 from the provisional
5 patent application that the exemplary embodiment shown
6 includes three cooling loops. Do you see that?

7 A. I see that statement, yes.

8 Q. Right. And the patent says, "The first cooling
9 loop is comprised of a constrictive convection plate 30
10 mounted to a display posterior 22."

11 Do you see that?

12 A. I see that. I'm having trouble seeing 22.

13 Q. I think that's likely a reference to an earlier
14 figure in the patent, but, nevertheless, it's a reference
15 to a constricted -- constrictive convection plate 30. Do
16 you see that?

17 A. Yeah.

18 Q. And, again, the term "constrictive" or
19 "constricted" convection plate is not used in your March
20 3rd provisional, correct?

21 A. It is not.

22 Q. And do you understand that MRI claims priority
23 to your '454 application for your '595 and '322 patents?

24 A. Yes.

25 Q. And do you understand that MRI does not claim

Heritage Reporting Corporation
(202) 628-4888

1 priority for those patents to your March 3rd provisional?

2 A. I can't say that sitting here, without going
3 through the files.

4 Q. If you could lean forward.

5 A. I said I can't say that sitting here, without
6 going through the files.

7 Q. Okay. I'd like to talk about the whiteboard
8 meeting. I think you testified there was only one
9 whiteboard meeting; is that right?

10 A. I believe that to be true, yes.

11 Q. And you don't know the date, other than it was
12 sometime between December 19th of 2007, the date of the NDA
13 being signed, and March 4th of 2008, the date of Chris
14 Bolton's e-mail to you?

15 A. That's correct.

16 Q. Correct?

17 A. That's correct.

18 Q. And I believe you testified that it was at that
19 meeting that you identified to Mr. Bolton certain patent
20 applications; is that right?

21 A. We did not divulge patent applications. We
22 diagramed the concept that I communicated to the Standley
23 Law Group, first directly to Jeff in early October 2007 and
24 then to Mark Engle in November of 2007, and then the new
25 CAD file from Bill in 2007, we communicated that concept.

1 But at that time, we did not share patent applications, no.

2 Q. Which was my question. You never shared patent
3 applications with Mr. Bolton, correct?

4 A. To the best of my knowledge, no.

5 Q. Okay. Now, there was a point that you contended
6 that Figure 9 was, in fact, Chris Bolton's hand drawing;
7 isn't that correct?

8 A. That is correct.

9 Q. And you contended that he drew the figure at a
10 meeting at MRI; isn't that right?

11 A. That is correct.

12 Q. And you contended that you had attended that
13 meeting, right?

14 A. Yes.

15 Q. And that Ware Bedell was at that meeting?

16 A. Yes.

17 Q. And you contended that Ware Bedell at your
18 direction made a drawing at the whiteboard, correct?

19 A. Yes.

20 Q. And at one point, you contended that Chris
21 Bolton made his sketch from Ware Bedell's drawing; isn't
22 that right?

23 A. At that time, I thought he had, yes.

24 Q. And you contended, in fact, that Figure 9, which
25 appears, for example, in your '595 patent application, was,

1 in fact, a photocopy of the sketch that Chris Bolton made
2 at that whiteboard meeting, correct?

3 A. I did because we did make a photocopy.

4 Q. And you contended that this sketch existed
5 before Mr. Bolton's CAD rendering that we've looked at;
6 isn't that right?

7 A. I did, yes.

8 Q. In fact, I seem to recall your contending that
9 the CAD rendering was just a prettied-up version of the
10 sketch; isn't that right?

11 A. In my mind, yes.

12 Q. And you contended that you were positive that
13 the sketch that we see as Figure 9 existed before the CAD
14 rendering; isn't that right?

15 A. Yes.

16 Q. But I took your testimony on direct to change a
17 little; is that fair?

18 A. I would say yes, because after the deposition --

19 Q. I just asked yes -- just yes.

20 A. Yes.

21 Q. Thank you. I'd like to look at JX-315C, please.
22 Can we -- don't put that up.

23 MR. KLINE: Counsel, this is the November 7th
24 e-mail that we showed at -- in opening. Can we stay on the
25 public record?

1 MR. MACHLEIDT: We can. Thank you for asking.

2 MR. KLINE: Yeah. Thank you.

3 Thank you, Your Honor.

4 BY MR. KLINE:

5 So we can call that up, Mr. Smith. Thank you.

6 Now, if we could back away from that a little, Mr. Smith.

7 I want to see the e-mail in the thread that I think is on

8 the next page of JX-0315C. That's correct.

9 At the top of the page, you'll see, Mr. Dunn,
10 that's an e-mail that you sent to Mark Engle copying Jeff
11 Standley and Emily Shultz. It's dated November 27th of
12 2007, correct?

13 A. Yes.

14 Q. And you sent that e-mail to those counsel
15 yourself, right?

16 A. Yes.

17 Q. You don't have a copy of that anymore, though,
18 right?

19 A. I do not.

20 Q. And that's because of the computer failure you
21 described?

22 A. That is correct.

23 Q. Now, in your e-mail, you refer to -- you say
24 you've come up with another cooling scheme that you want to
25 patent, in the second sentence.

1 Did I read that correctly?

2 A. Yes.

3 Q. You wrote, "This one I call the air-to-air
4 intercooler."

5 Did I read that correctly?

6 A. Yes.

7 Q. You said it was a -- self-deprecatingly, a
8 hare-brained idea. Do you see that?

9 A. Yes.

10 Q. And then you went on to say, "the idea is to
11 have a closed loop air circulation over the face of the
12 display and then cool this closed loop with outside air."

13 Do you see that?

14 A. Yes.

15 Q. Right. You don't use the term "constricted
16 convection," right?

17 A. I did not.

18 Q. You did not refer to a constricted convection
19 plate, correct?

20 A. Did not.

21 Q. You did not refer to a constricted convection
22 channel, correct?

23 A. Did not.

24 Q. We can take that down, Mr. Smith.

25 Mr. Dunn, you testified on direct with the aid

1 -- there was a demonstrative exhibit that was walking
2 through a CAD file, correct? Do you recall that testimony?

3 A. Earlier today? Yes.

4 Q. And you -- and that file was "new file from
5 Bill"; do you recall that?

6 A. Yes.

7 Q. Do you know who ran -- like whose hand did we
8 see in that movie that we watched?

9 A. Whose hand?

10 Q. Who ran -- who ran the -- who was running the
11 CAD?

12 A. That would have been Mike Brown.

13 Q. Okay. So you didn't run it?

14 A. No.

15 Q. Were you there when it was run?

16 A. I reviewed it with Mike, yes.

17 Q. That's not what I asked. Were you there when he
18 performed the steps that were recorded and ended up in that
19 demonstrative exhibit?

20 A. No.

21 Q. No, I don't want that up. Did I do that? It
22 wasn't me. Thank you.

23 What program did -- were we -- was being used to
24 show us that animation?

25 A. I can't definitively say. We use Pro Engineer,

1 I think it is called Creo. The file itself, "new file from
2 Bill," was done by Rick Pisano, and he was using Solid
3 Works at that time.

4 Q. Okay. So you use Pro Engineer today; is that
5 what I understood? Correct?

6 A. Correct.

7 Q. Your testimony is that the program was created
8 in Solid Works, is that correct?

9 A. The new file from Bill created by Rick Pisano at
10 my direction, I believe he used Solid Works. And, again,
11 I'm not an expert on that side of it.

12 Q. And, in fact, you are not skilled in Solid
13 Works; isn't that true?

14 A. I am not.

15 Q. And you have never been skilled in Solid Works;
16 isn't that true?

17 A. I have not. True.

18 Q. And, similarly, you would not know how to drive
19 Pro Engineer files; isn't that right?

20 A. I -- I can use the viewer, but I don't -- I
21 don't do CAD. I don't drive CAD. And I'm not very good
22 with the viewer.

23 Q. But files aren't created in the viewer; they're
24 just observed in the viewer, correct?

25 A. Right.

1 Q. Files are created in Solid -- Solid Works
2 itself, correct?

3 A. The "new file from Bill," I believe, was created
4 in solid works.

5 Q. Right. But not by you, right?

6 A. Not by me, no. At my direction, yes.

7 Q. I understand.

8 Mr. Dunn, you were asked about CX-442, if we
9 could call that up, on your direct examination. I'm sorry,
10 you were asked about 440 on your direct examination, if we
11 could see that.

12 A. 44 --

13 Q. CX-440. It's on your screen. You may recall
14 it.

15 A. Okay.

16 Q. Do you recognize it?

17 A. Yes.

18 Q. So this is an e-mail that you testified that you
19 received at 10:00 o'clock at night on April 24th of 2020,
20 right?

21 A. It was sent at 10:00 o'clock at night. I can't
22 say when I received it.

23 Q. Okay. It was sent by a Mr. -- how do I
24 pronounce his last name?

25 A. Romulus Stoain.

1 Q. Stoain. Mr. Stoian sent it at 10:20, April
2 24th, 2020; isn't that right?

3 A. That's what it says here, yes.

4 Q. Right. How many times have you spoken with
5 Mr. Stoian before you received this e-mail?

6 A. A few. It wasn't many. I mean, two or three
7 times maybe.

8 Q. Over how long a period of time?

9 A. A couple weeks.

10 Q. So for a couple of weeks before April 20th --
11 April 24th of 2020, you were talking with Mr. Stoian about
12 MRI's capabilities; is that correct?

13 A. Again, he reached out and contacted me. One of
14 our customers at the time, they were called smartLINK, Jon
15 Salisbury was having a conversation with Romulus and MRI
16 came up, and John suggested Romulus give us a call.

17 Q. What was the last thing you said?

18 A. I said Jon Salisbury suggested that Romulus give
19 me a call.

20 Q. So if you look at -- and we can keep this up and
21 show in split screen, Mr. Smith, CX-442.

22 And if you look down at the bottom, that's an
23 e-mail that you sent to Mr. Stoian, also on April 24th of
24 2020, right?

25 A. Yes.

1 Q. And you wrote, "Romulus, Jon Salisbury has good
2 things to say about you. And he's very passionate that you
3 and I should have a discussion."

4 Did I read that correctly?

5 A. Yes.

6 Q. Does that refresh your recollection when you
7 first spoke with Mr. Stoian?

8 A. Well, it says April 24th, 2020, so --

9 Q. You have no reason to believe you would have
10 spoken to him before this day, correct?

11 A. And I don't know that I -- since I had just sent
12 him this e-mail, I haven't spoken to him yet.

13 Q. Right. In fact, because you went on to say,
14 "Jon only provided me with your e-mail address." Right?

15 A. Yes.

16 Q. So the first time you ever had any contact with
17 Mr. Romulus was around -- by sending him an e-mail at 11:00
18 o'clock in the morning on April 24th of 2020, right?

19 A. Appears to be, yes.

20 Q. And he wrote back to you at 5:00 o'clock that
21 afternoon in his time: "Hope all is well. Checking to
22 see" -- well, strike that, no. Strike that.

23 Then if we go to CX-0440C, that's the e-mail you
24 looked at this morning; isn't that right?

25 A. Correct.

1 Q. And he sent you that e-mail on the same day,
2 didn't he?

3 A. Yes, he did.

4 Q. So everything Mr. -- everything you could have
5 told Mr. Romulus about Mr. Stoian about MRI would have
6 happened on that day, correct?

7 A. No. It's 10:00 o'clock at night when he is
8 responding to an e-mail I sent him at 11:00 o'clock in the
9 morning so I didn't talk to him on the 24th.

10 Q. So you didn't provide him with any information
11 on the 24th?

12 A. Not that I'm aware of.

13 Q. He wrote to you: "Good afternoon and many
14 thanks for taking the time talking to me."

15 A. Yeah.

16 Q. Do you see that?

17 A. Yes.

18 Q. Does that refresh your recollection whether you
19 spoke with Mr. Stoian on April 24th of 2020?

20 A. It appears I did.

21 Q. Right. And that would have been the first day
22 you had ever spoken with him, isn't it?

23 A. Since I sent an e-mail at 11:23 the same
24 morning --

25 Q. Right.

1 A. -- likely yes.

2 Q. So you had not, in fact, been talking with
3 Mr. Stoian for a couple of weeks over a couple of
4 conversations before he sent his April 2020 e-mail; isn't
5 that right?

6 A. We had more than one conversation. It was
7 evidently subsequent to this.

8 Q. Right. But by the time he sent this e-mail, you
9 had only had one; isn't that right?

10 A. Likely yes.

11 Q. Do you know how long it lasted?

12 A. I do not.

13 Q. Do you know what information you provided to him
14 about MRI?

15 A. I do not.

16 Q. Do you recall any information that you provided
17 to him about MRI's products?

18 A. I do not.

19 Q. Did you provide any information to him about
20 MRI's technology?

21 A. I did not.

22 Q. Did you present to him a PowerPoint presentation
23 of any kind on that day?

24 A. I did not.

25 Q. Just an oral discussion?

1 A. I'm sorry?

2 Q. Just an oral discussion over the telephone?

3 A. That's correct.

4 Q. And it was based on that discussion and the
5 information exchanged between you at that discussion that
6 Mr. Stoian sent this e-mail, correct?

7 A. That's speculation because I know in the phone
8 conversation, it may have been that one that afternoon,
9 Romulus definitely said to me that many of his customers
10 were asking for MRI --

11 Q. I'm not going to ask you to put hearsay into the
12 record.

13 A. Okay.

14 Q. I understand it happens. I'm not going to
15 solicit it. Okay?

16 MR. MACHLEIDT: Objection. That's not hearsay.
17 Those are admissions of a party opponent. He worked for
18 respondent. I ask that he stop interrupting my witness.

19 MR. KLINE: Your Honor, he wants to say what
20 other people said.

21 MR. MACHLEIDT: It's --

22 MR. KLINE: It's totem pole hearsay, Your Honor.

23 JUDGE BHATTACHARYYA: He can answer the
24 question. Can you repeat the question? Let's see what the
25 question is.

1 MR. KLINE: As often happens, Your Honor, I lose
2 track of the question. I'll withdraw the question.

3 JUDGE BHATTACHARYYA: All right. You can
4 withdraw the question and --

5 MR. KLINE: I withdraw the question.

6 JUDGE BHATTACHARYYA: All right. We'll withdraw
7 the question and you can ask another question.

8 BY MR. KLINE:

9 Q. If we could turn to --

10 (Discussion between counsel.)

11 MR. KLINE: We can stay on the public record for
12 this, Your Honor, even though the exhibit is designated C.
13 Thank you. Thank you.

14 JUDGE BHATTACHARYYA: Yes.

15 BY MR. KLINE:

16 Q. If we could look at CX-0137C.

17 A. CX-0137C? Mr. Kline; is that correct?

18 Q. Yes, thank you. Do you see this?

19 A. Yes.

20 Q. And this is on MRI letterhead, correct?

21 A. Yes.

22 Q. And if we turn to the last page of the document,
23 it looks like it was sent by Darryl Parsons, correct?

24 A. Yes.

25 Q. And you were copied on it, correct?

Heritage Reporting Corporation
(202) 628-4888

1 A. Yes.

2 Q. Do you recall seeing the document in the July
3 2008 time frame?

4 A. I do not.

5 Q. Is there any reason to think you didn't?

6 A. It was -- I was copied on it. It came through
7 my e-mail, most likely saw it.

8 Q. This is a letter sent July 28th, 2008 to the
9 Hyundai Corporation, correct?

10 A. Yes.

11 Q. And Mr. Parsons wrote to Hyundai, in response to
12 your request, MRI is pleased to provide a firm fixed price
13 proposal for the subject displays.

14 Did I read that correctly?

15 A. Yes.

16 Q. And you can see, if we turn to the third page,
17 CX-0137C.0003 -- do you see that?

18 A. Yes.

19 Q. That is a copy of the CAD rendering that
20 Mr. Bolton sent to you on March 4th of 2008; isn't that
21 correct?

22 A. I'd have to see that e-mail again, but most
23 likely, yes.

24 Q. And it's labeled here on this page MRI
25 proprietary information; isn't that right?

Heritage Reporting Corporation
(202) 628-4888

1 A. Yes.

2 Q. And if we could turn, please, to CX-0139C. Do
3 you recognize this document, Mr. Dunn?

4 A. Sitting here, I don't recall it.

5 Q. Do you recall the look -- the appearance of the
6 document? Does it -- based on your experience with MRI,
7 does it appear to you to be an MRI letter sent to Xperex
8 Corporation?

9 A. It does.

10 Q. And if we turn to the last page at Bates page 7,
11 again, we see that it's signed by Mr. Parsons, correct?

12 A. Yes.

13 Q. And you were copied, correct?

14 A. Yes.

15 Q. Do you have any reason to doubt you received a
16 copy of this at the time?

17 A. I'm sure I did.

18 Q. If we come back to the first page, it's
19 addressed to Xperex Corporation, right?

20 A. Yes.

21 Q. And Mr. Parsons writes to Barry Pon: "In
22 response to your request, MRI is pleased to provide herein
23 our firm fixed pricing proposal." Do you see that?

24 A. Yes.

25 Q. And there's an image right there on the first

Heritage Reporting Corporation
(202) 628-4888

1 page of the document; isn't that correct?

2 A. Yes.

3 Q. And that image is a copy of one of the CAD
4 designs that Mr. Bolton sent to you by way of his March
5 4th, 2008 e-mail, isn't it?

6 A. Yes.

7 Q. And, in fact, here, though, it's labeled MRI
8 proprietary information; isn't that correct?

9 A. Yes.

10 Q. Mr. Dunn, you testified on direct that you
11 participated in -- I think the term of art sometimes is
12 teardowns of Samsung products. Did I understand your
13 testimony correctly?

14 A. Per se, I had very little involvement.

15 Q. You just sort of popped in and out I'm told; is
16 that correct?

17 A. That's correct.

18 Q. When did you -- what time frame was that?

19 A. The 85 was many years ago, as was our first pass
20 -- well, I guess our past pass on the 55 -- when I say
21 many, it was probably three, four, five years ago. The 46
22 was probably two, three years ago. And then we -- we the
23 company -- did another teardown of the 55 this calendar
24 year.

25 Q. Thank you.

1 MR. KLINE: I pass the witness, Your Honor.

2 JUDGE BHATTACHARYYA: All right.

3 REDIRECT EXAMINATION

4 BY MR. MACHLEIDT:

5 Q. Hello again, Mr. Dunn.

6 A. Good afternoon.

7 Q. I'm going to begin with a redirect on some of
8 the points that you ended with during the
9 cross-examination. What did Mr. Romulus Stoain -- if I can
10 say that right -- of Samsung SDS America tell you during
11 your conversations with him? And if you may lean as close
12 as you can to the microphone.

13 A. He told me during the phone conversation that he
14 had a growing number of potential customers that were
15 requesting the MRI technology and features, that they liked
16 the Samsung price and wanted to know how could we
17 incorporate the MRI technology into the Samsung displays.

18 Q. Earlier today during the cross, do you remember
19 some questions about Figure 2 of, for example, your '595
20 patent?

21 A. Yes.

22 Q. In the, I think, still the medium size binder
23 next to you that has the CXs and the JXs --

24 A. I put them on the floor to get them out of the
25 way. Before we go into --

Heritage Reporting Corporation
(202) 628-4888

1 Q. Actually, I apologize. Do you have a binder
2 that says something along the lines of correspondence with
3 Samsung?

4 A. Yes.

5 Q. Please go to the tab CX-449C in that binder.

6 A. CX-449C. Okay.

7 Q. Do you recognize what is located at that tab?

8 A. Yes. This is an iteration of follow-up letters
9 that the Standley Law Group sent to Samsung regarding
10 patents.

11 Q. Mr. Goodin, could we put up CX-449C, please.
12 And let's focus on the first half for now. I think that
13 works just enough.

14 Mr. Dunn, when was this letter sent?

15 A. This was sent May 17th of 2016.

16 Q. Mr. Goodin, let's scroll down to the bottom of
17 this page and, frankly, if you can also go to the second
18 page at the same time. Maybe yes, maybe no.

19 But while that happens, Mr. Dunn, the very last
20 bullet point on this first page of the exhibit, what patent
21 is referenced in that bullet.

22 A. The '595.

23 Q. And, Mr. Goodin, if it's not possible, can we
24 just go to the second page and look at the top.

25 Mr. Dunn, what patent is referenced at the only

1 bullet point on this page?

2 A. '322.

3 Q. Do your '595 and '322 patents have the Figure 2

4 Mr. Kline asked you about?

5 A. I would have to look.

6 Q. Take a look at JX-1.

7 A. JX-1.

8 Q. It is probably in the biggest binder you have up
9 there.

10 A. You're referring to Figure 2?

11 Q. Yes, please.

12 And while that's happening, Mr. Goodin, you can
13 keep this down -- you can take this down, but no need to
14 put anything else up.

15 A. So, I'm sorry, Dario, ask your question again,
16 please?

17 Q. Of course. Does the '595 patent have the Figure
18 2 that Mr. Kline was asking you about?

19 A. Yes.

20 Q. In response to the May 17th, 2016 letter that
21 was sent to Samsung identifying the '595 patent, what, if
22 anything, did Samsung tell you about your use of Figure 2
23 in that patent?

24 A. Absolutely nothing.

25 Q. When -- take a step back. Before this lawsuit,

1 when, if ever, has Samsung accused you of violating any
2 confidentiality agreements?

3 A. To the best of my knowledge, never.

4 Q. Do you remember a few questions during the
5 cross-examination about an NDA signed -- well, an NDA
6 between Samsung and APC?

7 A. Yes.

8 Q. Do you know why that NDA has an APC signature
9 block and not an MRI signature block?

10 A. I do now.

11 Q. Why does that NDA have an APC signature block
12 and not one for MRI?

13 A. Well, after being deposed and asked that
14 question, I went back and researched it and was reminded
15 that at that time, which would have been the end of 2007,
16 beginning of 2008, MRI did not meet Samsung's financial
17 criteria to be a customer. So we could not purchase
18 product from Samsung. We had no creditworthiness, but
19 Samsung was willing to sell to APC.

20 I owned both companies, and as we have spoken,
21 there were shared services and it was not uncommon to
22 transfer material from one company to the other. So the
23 NDA was executed between Samsung and APC.

24 Q. During your cross, there was some discussion
25 about what you may or may not have testified about during

1 your recent deposition in terms of the NDA. Do you
2 remember that?

3 A. Yes.

4 Q. Did Mr. Kline show you at your deposition a copy
5 of the NDA that was signed by both APC and Samsung?

6 A. He did not.

7 Q. Do you recall being asked a few questions about
8 Samsung technical drawings in relation generally with
9 Figure 2?

10 A. Yes.

11 Q. In I think the binder you have open, but I might
12 be wrong, is there a tab JX-66C?

13 A. Yes.

14 Q. Are you familiar with what is located at JX-66C?

15 A. This is a document I tried to refer to earlier
16 but was not allowed.

17 Q. Oh. Mr. Dunn, while you're looking at it,
18 Mr. Goodin, can you put up JX-66C. And if you could call
19 out maybe what's in the black rectangle so we see it
20 closer. And I don't have all of the -- thank you.

21 Mr. Dunn, are we looking, at the screen, the
22 same thing that you have in your binder?

23 A. Yes, we are.

24 Q. What is the date of this document?

25 A. August 2nd, 2007.

1 Q. What exactly is this document?

2 A. Well, this is the specification that existed at
3 that time produced by Samsung for their 70-inch display
4 module.

5 Q. Mr. Goodin, can you flip to -- I think it's page
6 22, and we'll see if I'm right.

7 A. You are.

8 Q. Mr. Dunn, ignoring the confidentiality
9 designations that we lawyers put on many documents, where,
10 if anywhere, within this document is there a
11 confidentiality marking put on by Samsung?

12 A. There is not a confidential marking anywhere in
13 the document.

14 Q. Mr. Goodin, you can take that down. Thank you.

15 MR. MACHLEIDT: Your Honor, ten seconds to
16 confer with my colleagues?

17 JUDGE BHATTACHARYYA: Yes.

18 MR. MACHLEIDT: Thank you.

19 Your Honor, no further questions. I pass the
20 witness.

21 JUDGE BHATTACHARYYA: Thank you. Anything
22 further?

23 MR. KLINE: No further questions, Your Honor.

24 JUDGE BHATTACHARYYA: Thank you for your time,
25 Mr. Dunn.

1 THE WITNESS: Thank you.

2 MR. MACHLEIDT: Your Honor, while we do a
3 reshuffling, MRI will next call Mr. Dave Williams. And he
4 should be out of the room. He's out of the room. So may
5 we take a moment to go bring him in?

6 JUDGE BHATTACHARYYA: Of course.

7 THE WITNESS: Leave all this here?

8 JUDGE BHATTACHARYYA: Ask your counsel how they
9 want to --

10 MR. MACHLEIDT: We will move that to somewhere
11 where nobody loses it. Thank you, Mr. Dunn.

12 (The witness stood down.)

13 JUDGE BHATTACHARYYA: Good afternoon,
14 Mr. Williams.

15 THE WITNESS: Good afternoon, Your Honor. Nice
16 to meet you.

17 JUDGE BHATTACHARYYA: You understand that you're
18 under an obligation to testify truthfully here today?

19 THE WITNESS: Yes, I am.

20 JUDGE BHATTACHARYYA: Would you please raise
21 your right hand.

22 Whereupon--

23 DAVID WILLIAMS,
24 having been first duly sworn/affirmed, was examined and
25 testified as follows:

Heritage Reporting Corporation
(202) 628-4888

1 THE WITNESS: Yes, I do.

2 JUDGE BHATTACHARYYA: Thank you.

3 MS. GEYER: Good afternoon, Your Honor.

4 JUDGE BHATTACHARYYA: Good afternoon.

5 DIRECT EXAMINATION

6 BY MS. GEYER:

7 Q. Good afternoon, Mr. Williams.

8 MS. GEYER: I have a table of exhibits I plan to
9 admit through him. Would you like that ahead of time or
10 tomorrow after we've discussed them?

11 JUDGE BHATTACHARYYA: Please bring it to me
12 tomorrow after you've had a chance to confer with the other
13 side.

14 MS. GEYER: Perfect.

15 BY MS. GEYER:

16 Q. Can you please introduce yourself to the Court.

17 A. My name is David Williams.

18 Q. Where do you work, Mr. Williams?

19 A. I am currently retired.

20 Q. Where are you retired from?

21 A. I am retired from Manufacturing Resources
22 International.

23 Q. When did you start working at Manufacturing
24 Resources International?

25 A. I started working for -- can I say MRI?

Heritage Reporting Corporation
(202) 628-4888

1 Q. Yes.

2 A. I started working for MRI in January of 2007.

3 Q. What was your role at MRI in January of 2007?

4 A. I was hired as the vice president of engineering
5 and chief technical officer. In addition to that, I was
6 also hired as the vice president of engineering and chief
7 technical officer for American Panel Corporation as well.
8 So I had two -- two titles.

9 Q. Can you please describe your educational
10 background.

11 A. I received a Bachelor's of science in electrical
12 engineering from Youngstown State University in Ohio.
13 After I started working for Hughes Aircraft out of college,
14 worked with them for seven years. About four or five years
15 in with Hughes Aircraft, they had a fellowship program, I
16 went and received a Master's degree in computer engineering
17 from California State University at the Fullerton branch
18 where Hughes Aircraft was located.

19 Q. So you mentioned your experience at Hughes. Can
20 you please also briefly describe the other experiences
21 you've had between then and joining MRI?

22 A. Sure. I worked for Hughes Aircraft for seven
23 years. We had two children and my wife did not want to
24 have concrete babies, as she referred in California, so we
25 moved to Georgia where I worked for a company called Rou

Heritage Reporting Corporation
(202) 628-4888

1 Information Display Systems. I worked for them for three
2 years.

3 And then I received a phone call from Mr. Joe
4 Goode, who was one of the partners with Mr. Dunn at a
5 company called Avionic Displays Corporation, ADC. I took
6 on a role in ADC as a design -- hardware design engineer
7 and designing electrical circuit boards. Primarily my
8 background was in video and graphics boards. I worked at
9 ADC for approximately four years.

10 The four owners then sold the company. They had
11 a business side of the company and a military side of the
12 business. The military was sold to L3 Communications, and
13 the business side of the company was sold to Universal
14 Avionics Systems Corporation.

15 I continued to work -- I'm sorry, this is
16 probably going too long. Continued to work for Universal
17 until January of 2007, when I then transferred to MRI/APC.

18 Q. When you started working at MRI in January of
19 2007, what products was MRI offering at the time?

20 A. So, to the best of my knowledge, in 2007 Mr.
21 Dunn was focused on working on a 47-inch car wash display
22 that was being deployed up in Canada. And then we were
23 starting work for a double-sided 20.1-inch diagonal display
24 for a company called Gas Station TV, GSTV.

25 Q. I'd like to focus on the 47-inch car wash. Who

1 was the customer for that product?

2 A. We sold the product to Convergent, but then
3 Convergent resold the product -- I don't know if they
4 resold it -- but the end user was Petro-Canada for MacNeil
5 Car Wash, was the final end customer.

6 Q. What cooling systems were used in the 47-inch
7 car wash?

8 A. I'm sorry, I didn't hear --

9 Q. What cooling systems were used in the 47-inch
10 car wash?

11 A. There were several iterations of the 47-inch car
12 wash. The one in 2007 when I came onboard, Mr. Dunn was
13 working on a liquid cooled version of the 47-inch display.
14 That's the one that I'm the most familiar with.

15 Q. Did the liquid cooling solution have any
16 problems?

17 A. It did. No doubt about it. There was -- I
18 remember Mr. Dunn -- I can still see him back there working
19 on the 47-inch. They had problems with having maybe too
20 much pressure of the fluid passing between the cover glass,
21 LCD cover glass, as well bulging, breaking the cover glass,
22 not having enough fluid going through the system. So they
23 had to go through quite a few iterations of getting it to
24 work, but eventually, yes, they did get that system to work
25 to prevent -- excuse me -- to prevent solar clearing of the

1 LCD in an outdoor environment.

2 And that liquid cooling, in essence, is really a
3 closed loop system because it was not exposed to any
4 outdoor environmental. In addition, it had fans at the
5 bottom of the unit that was bringing in, if you will,
6 outside ambient air and blowing up through the system. And
7 there was a radiator that the liquid would pass through
8 prior to going to a holding tank, and so that outside
9 ambient air was then cooling the closed loop liquid in that
10 radiator before being exhausted out the top of the unit.

11 That's the best of my memory on that particular
12 product.

13 Q. After those iterations to fix the problems, did
14 the final solution fix the pressure problems with the fluid
15 in the bulging and breaking that you mentioned?

16 A. Yes, it did.

17 Q. Did MRI consider that liquid cooling to be a
18 sufficient long-term solution to cool displays?

19 A. No. The coolant that we ended up using and that
20 Mr. Dunn ended up using was referred to as TKS. It's
21 basically ethylene glycol, isopropyl alcohol, and distilled
22 water. Of course, it's a flammable material, so that's not
23 a good thing.

24 You -- if somebody was to break the front manowe
25 glass, and then you have this fluid leaking out of the unit

1 on to the ground, so that presents an environmental issue.
2 So the short answer, it's not a long-term viable solution.

3 Q. Did MRI eventually come up with an alternate to
4 the liquid cooling solution?

5 A. Yeah. It's interesting. Mr. Dunn and I had
6 worked together for quite a few years, just stated almost
7 25 years, and it wasn't uncommon for Mr. Dunn to come into
8 my office early in the morning. I'm an early riser. I'm
9 usually in the office by 5 a.m. Mr. Dunn would come in and
10 he would have this big smile on his face and he would say:
11 Dave, I have got this great idea. And he would go on to
12 explain.

13 Well, I distinctively remember he came into my
14 office one morning, he said: Dave, I have this great idea.
15 We can use an air-to-air cooling system instead of using a
16 liquid cooled system.

17 Q. When did that discussion with Mr. Dunn occur?

18 A. I do not know the exact date.

19 Q. When was the next time you remember Mr. Dunn
20 explaining that air-to-air cooling system to you or anyone
21 else?

22 A. The next time that I'm aware of Mr. Dunn
23 explaining this to, I'll say, the general public was during
24 a meeting that took place in December 17th of 2007.

25 MS. GEYER: Your Honor, may I approach the

1 witness to hand him an exhibit?

2 JUDGE BHATTACHARYYA: Yes.

3 BY MS. GEYER:

4 Q. Mr. Williams, if you could please look in the
5 folder at JX-0048.

6 Do you recognize that document?

7 A. Yes, I do.

8 Q. What is JX-0048?

9 A. This is an e-mail that I sent to my direct
10 reports at the time, Charles Lemons, who was the manager of
11 the Electrical Engineering Department; Ware Bedell, manager
12 of the Mechanical Engineering Department, and Jack
13 Bartholmae; who was a staff electrical engineer, all three
14 gentlemen reporting to me, basically informing them of a
15 visit by a customer the following week.

16 Q. Mr. Goodin, can you please place JX-48 on the
17 screen? Thank you.

18 Mr. Williams, when did you send that e-mail?

19 A. I send that on Thursday, December 13th, 2007 at
20 5:16 a.m.

21 Q. And who was the customer that you were going to
22 be meeting with or that was being discussed?

23 A. That was with Vertigo.

24 Q. Is this the same meeting you referenced earlier
25 when you last heard Bill Dunn -- or when you next heard

1 Bill Dunn discuss his air-to-air cooling solution?

2 A. With a public -- yes, it is.

3 Q. As of December 13th when you sent this e-mail,
4 what did you understand were going to be the subjects of
5 the meeting between MRI and Vertigo?

6 A. To the best of my knowledge, this was to form
7 some type of a partnership with Vertigo.

8 Q. Around that same time, did MRI have any other
9 discussions with different companies about forming a
10 business partnership?

11 A. Not that I'm aware of, no.

12 Q. Were MRI and Vertigo going to be discussing any
13 particular projects or products?

14 A. It was going to be in regard to the 70-inch
15 display.

16 Q. Who was the customer for that 70-inch display?

17 A. The customer that we were currently in
18 discussions with was Outdoor Promotions.

19 Q. What was the size of the potential opportunities
20 of the partnership between MRI and Vertigo?

21 A. As I stated in the e-mail here, there was sales
22 projected at somewhere between 4 and a half to 5 million
23 dollars.

24 Q. How important was it for MRI to have a project
25 of 4 and a half to 5 million dollars in 2007?

Heritage Reporting Corporation
(202) 628-4888

1 A. That was very significant. We had a rather
2 small backlog at the time. We were a new company, didn't
3 have a whole lot of sales coming in, so this was a huge
4 opportunity. And I might add that that if MRI was to get a
5 4 and a half to 5 million dollar order to this day, that
6 would still be a good opportunity that we would --

7 Q. Are you aware of any other projects or
8 opportunities that MRI had in 2007 that were around 4 and a
9 half to 5 million dollars?

10 A. No.

11 Q. Did the meeting between MRI and Vertigo occur?

12 A. Yes, it did.

13 Q. And where did that meeting occur?

14 A. The meeting occurred during the week of December
15 17th at American Panel Corporation in the conference room
16 at APC.

17 Q. Who attended that meeting?

18 A. From the MRI side, representatives were Ware
19 Bedell, again, the manager of the Mechanical Engineering
20 Department; Mr. Dunn; myself; and then the gentleman that
21 we met with from Vertigo. His name was Mr. Chris Bolton.

22 Q. Who is Chris Bolton?

23 A. I did not know who Chris Bolton was until the
24 meeting took place during that week of December 17th.

25 Q. What impression did you have of Chris Bolton

Heritage Reporting Corporation
(202) 628-4888

1 when you met him at that meeting?

2 A. I'm kind of smiling. I -- when I first met
3 Chris Bolton, I walked in the conference room. I think he
4 was -- I was the first person to meet him. He had certain
5 mannerisms, facial expressions. He seemed genuinely
6 excited to be meeting with us. I shook his hand. We made
7 introductions. And then as he's talking, he kind of just
8 struck me odd because he had a British accent, and I think
9 that just caught me off guard. But just that initial
10 introduction and meeting kind of left a lasting impression
11 in my mind.

12 Q. Do you remember what was discussed at that
13 meeting?

14 A. From a high level, Mr. Dunn, since he was
15 present, did the overall view of APC history, the type of
16 products that APC had developed over the years, and some of
17 the MRI products that we were working on. I believe
18 Mr. Bolton had a PowerPoint presentation showing the street
19 furniture structures that -- I think that was their forte,
20 was street furniture.

21 Q. What is street furniture?

22 A. Again, street furniture I typically think of as
23 just bus shelter type structures themselves.

24 Q. Based on the capabilities of MRI and Vertigo,
25 what were the roles that each company was going to play in

1 that potential business partnership?

2 A. So it was my understanding that MRI had limited
3 capability for, I'll just say, fabricating nice, fancy,
4 aesthetically pleasing structures. That's what Vertigo
5 brought to the table, was they seemed to have this
6 capability of really designing nice-looking structures.

7 MRI's contribution to this partnership would
8 have been our display technology and marry the two together
9 to try to further the business opportunities for both
10 companies.

11 Q. I believe you said this earlier, but did
12 Mr. Dunn present his air-to-air cooling system at that
13 meeting?

14 A. Yes, he did. We were discussing the Outdoor
15 Promotions using air-conditioning to cool the LCD.
16 Mr. Dunn then started talking, but we don't have to use
17 air-conditioners initially, but I've got this great idea, I
18 have this new concept. We can use air-to-air cooling, open
19 loop/closed loop, to, basically, get rid of
20 air-conditioners and have a nice cleaner, cheaper, quieter,
21 overall solution.

22 So Mr. Dunn is explaining his concept, and at
23 some point during the discussion, I'm not sure whether
24 Mr. Dunn noticed that Mr. Bolton had -- wasn't quite
25 grasping or understanding what he was saying. He

1 instructed Ware Bedell -- Mr. Dunn instructed Ware Bedell
2 to go to the whiteboard and asked Ware to start drawing as
3 Mr. Dunn is explaining his concept.

4 As I said earlier, Mr. Dunn was the primary
5 spokesman for this. I was sitting at the table, conference
6 table, across from Mr. Bolton. And as Mr. Dunn is
7 explaining his open and closed loop concept, Ware is
8 drawing on the whiteboard, I kept looking over at
9 Mr. Bolton and noticed that he had a notebook open in front
10 of him and he was writing, drawing in his notebook, looking
11 at the whiteboard, back to his notebook, up to the
12 whiteboard, and back to his notebook the entire time.

13 Q. In addition to drawing in his notebook, did
14 Mr. Bolton contribute anything to the image being drawn on
15 the whiteboard?

16 A. Not that I recall.

17 Q. Why do you say that?

18 A. I just seem to remember after Mr. Dunn had
19 completed his conversation, explanation might be a better
20 word of this open loop concept, he happened to look over
21 and see what Mr. Bolton had in his notebook. And he said:
22 Geez, Chris, your drawing looks a whole lot better than
23 what my mechanical engineer, Ware Bedell, just drew on the
24 whiteboard. Do you mind if I make a copy of that?

25 And Mr. Bolton agreed that Mr. Dunn could make a

1 copy of it. So Mr. Dunn took Mr. Bolton's notebook, walked
2 out, made a hard copy of it, walked back in the conference
3 room, handed Mr. Bolton back his notebook, and Mr. Dunn
4 retained a hard copy of whatever that was in Mr. Bolton's
5 notebook.

6 Q. Do you remember what the image on the whiteboard
7 looked like?

8 A. I do not. I don't -- I don't clearly remember.

9 Q. Did you ever see what Mr. Bolton drew in his
10 notebook?

11 A. No, I did not.

12 Q. Did you ever see the photocopy that was made of
13 Mr. Bolton's notebook?

14 A. No, I did not.

15 Q. Do you know what happened to the photocopy of
16 Mr. Bolton's notebook?

17 A. No, I do not.

18 Q. What else do you recall about that meeting?

19 A. I believe that's just about it.

20 Q. That meeting happened over 15 years ago. Why do
21 you remember that meeting with such clarity?

22 A. I think I remember for a couple of reasons.

23 One, as I stated earlier, there is something about

24 Mr. Bolton, meeting him for the first time, the British

25 accent stuck in my mind. The second thing is it just

1 seemed an atypical type meeting where, as Bill is
2 explaining this, his concept or his idea to have actually
3 looked across and see somebody making notes or doing
4 something in a notebook, constantly looking at what was
5 going on versus just kind of sitting back and listening,
6 trying to take it all in. It just seemed a little odd to
7 me at that time.

8 So I don't know. It was just that combination
9 of an atypical meeting and something that I still kind of
10 remember to this day.

11 Q. Within the past five years, have you ever
12 discussed the whiteboard meeting with Mr. Dunn?

13 A. No, I have not.

14 MS. GEYER: I pass the witness, subject to
15 redirect.

16 JUDGE BHATTACHARYYA: Thank you.

17 MR. MCCARTHY: I believe we have a couple
18 binders to pass out, Your Honor.

19 May I proceed, Your Honor?

20 JUDGE BHATTACHARYYA: Yes. Please go ahead.

21 CROSS-EXAMINATION

22 BY MR. MCCARTHY:

23 Q. Good afternoon, Mr. Williams. Good to see you
24 again.

25 A. Good to see you, sir.

1 Q. Mr. Williams, it seems like the majority if not
2 all of your testimony was focused on things that happened
3 15 or more years ago; isn't that right?

4 A. Correct.

5 Q. I will assume you would agree with me as a
6 practical matter that memories tend to fade over time,
7 wouldn't you?

8 A. They tend to on certain things, yes.

9 Q. And perhaps over time memories tend to change as
10 well, right?

11 A. In certain situations, I would agree with that.

12 Q. All right. Let's circle back. You, I believe,
13 testified that you met Mr. Dunn in 1995 when you started
14 working for a company named ADC, right?

15 A. Yes.

16 Q. And for the record, ADC is Avionic Displays; is
17 that fair?

18 A. Avionic Displays Corporation.

19 Q. You met Mr. Dunn at Avionic Displays in 1995,
20 but you didn't really interact with him much during your
21 time at ADC; is that right?

22 A. That's not correct, not entirely true. Mr. Dunn
23 was one of the four owners of the company, along with Joe
24 Goode, Jean Strickland, and Dave Didier, my primary, go-to
25 gentleman was Joe Goode, he was the one that hired me, but

1 I still had interactions with Mr. Dunn during my tenure at
2 ADC.

3 Q. You would agree with me, though, that during
4 your tenure you did not interact with Mr. Dunn that much,
5 right?

6 A. Not that much but, no, I was aware of him.

7 Q. Thank you, Mr. Williams.

8 In 1999 Universal Displays and L3 Communications
9 purchased ADC, I think you testified to that on direct,
10 right?

11 A. Yes.

12 Q. And then at the time of that purchase, you
13 started working for Universal Displays. Fair?

14 A. Universal Avionic Systems Corporation.

15 Q. Sorry, Universal Avionic Systems Corporation,
16 can we call that UAS?

17 A. Fair.

18 Q. You started working for UAS in 1999, right?

19 A. Yes.

20 Q. And during the transition to UAS, your job
21 responsibilities stayed the same as they were when you were
22 working at ADC, right?

23 A. Yes, I was still designing basically video and
24 graphics cards.

25 Q. Video graphics cards to be used in LCD displays,

1 right?

2 A. Yes.

3 Q. Now, between the years 1999 and 2005, while you
4 were at UAS, you interacted with Mr. Dunn quite a bit,
5 right?

6 A. Yes, I did.

7 Q. But the time period there is very specific. It
8 was between 1999 and 2005 that you were interacting with
9 Mr. Dunn quite a bit, right?

10 A. Yes.

11 Q. Because in 2005 Mr. Dunn was relieved of his
12 responsibilities within UAS, right?

13 A. Yes, he was.

14 Q. And the reasons why Mr. Dunn was released from
15 his responsibilities at UAS are unknown to you, aren't
16 they?

17 A. That is correct. I do not know the reason why.

18 Q. Got it. But after Mr. Dunn was relieved of his
19 responsibilities, you kept working at UAS, right?

20 A. Yes, I did.

21 Q. And you had no interaction with Mr. Dunn between
22 his departure in 2005 and somewhere in the middle of 2006,
23 right?

24 A. That is correct.

25 Q. In the middle of 2006, Mr. Dunn called you while

1 you were still an employee at UAS, right?

2 A. Yes.

3 Q. And Mr. Dunn had a specific request for you that
4 you design a circuit board for him, right?

5 A. Correct.

6 Q. And you went ahead and you did design that
7 circuit board for Mr. Dunn while you were employed at UAS,
8 right?

9 A. Yes.

10 Q. You don't know what that circuit board was going
11 to be used in, but you know that it was for some sort of
12 small scale LCD display, right?

13 A. Correct.

14 Q. And you didn't know what application the circuit
15 board would be used in, right?

16 A. I don't recall the application it was going to
17 be used in.

18 Q. As part of your design process, Mr. Dunn
19 purchased for you a platform called OrCAD that you
20 installed on to your computer and then designed the circuit
21 board for Mr. Dunn, right?

22 A. Correct. I purchased a computer separate from
23 the one that I used for Universal Avionics Systems
24 Corporation, so that there would be no conflict of
25 interest. And Mr. Dunn also bought me the OrCAD, so that,

1 again, I wasn't using a software tool that would be
2 construed as being a conflict of interest.

3 Q. Got it. And then for the -- over the course of
4 many hours for two to three months, you designed a circuit
5 board for Mr. Dunn, right?

6 A. Yes.

7 Q. Mr. Dunn didn't pay you for any of that work?

8 A. No.

9 Q. And then at some point after you provided your
10 deliverables to Mr. Dunn in 2006, you were asked to be the
11 VP of engineering at MRI and APC, right?

12 A. Correct.

13 Q. And when you were asked to be the VP of
14 engineering at MRI and APC, that was the first time you had
15 ever had a direct report in your career, right?

16 A. Correct.

17 Q. Now, your recollection is that prior to joining
18 MRI, MRI provided a 32-inch pump top display; is that
19 right?

20 A. Prior to me joining MRI? Yes, they had a
21 32-inch.

22 Q. And the 32-inch product was a double-sided
23 product, right?

24 A. Yes, it was.

25 Q. It had cooling features, right?

1 A. I can't speak to that directly because that came
2 before my time at MRI in 2007, January 2007.

3 Q. Can we look at your deposition transcript?

4 Well, let me ask you a different question.

5 I took your deposition in this case, didn't I,
6 Mr. Williams?

7 A. Yes.

8 Q. And that was in March of this year?

9 A. Yes.

10 Q. My apologies. You actually had multiple
11 depositions taken related to Mr. Dunn's patents, haven't
12 you?

13 A. Yes, I have.

14 Q. You had your deposition taken back in October of
15 2018, didn't you?

16 A. Yes.

17 Q. And that deposition was taken by a different
18 attorney, wasn't it?

19 A. Yes.

20 Q. You were under oath during that deposition?

21 A. Yes.

22 Q. Now, I believe that I asked you, Mr. Williams,
23 were there any cooling features in the 32-inch pump top
24 display that MRI was selling prior to 2007?

25 MS. GEYER: Objection, Your Honor, this is

1 outside the scope of direct. We never discussed this pump
2 top display, and it was before his time at MRI.

3 JUDGE BHATTACHARYYA: Mr. McCarthy?

4 MR. McCARTHY: Your Honor, he discussed multiple
5 products that MRI was selling. Simply because they didn't
6 want to talk about one that MRI sold, doesn't mean it's
7 outside the scope of his direct, which clearly covered
8 MRI's products and MRI's history.

9 MS. GEYER: We talked about MRI's products in
10 2007 that were available when he started, which were only
11 two products, which were the ones he talked about, neither
12 of which is the one he is asking about now.

13 JUDGE BHATTACHARYYA: Can you relate what your
14 questioning is going to be about to a subject matter that
15 was covered in the direct examination?

16 MR. McCARTHY: Your Honor, it is related to the
17 evolution of MRI's technology from about the time that
18 Mr. Williams joined the company through the 2008 whiteboard
19 meeting.

20 JUDGE BHATTACHARYYA: The objection is
21 overruled.

22 BY MR. McCARTHY:

23 Q. Mr. Williams, were there any cooling features in
24 the 32-inch pump top display that MRI was selling prior to
25 2007?

1 A. Based on the information that I had to review
2 for the 2018 deposition --

3 Q. I believe it's just a yes-or-no question,
4 Mr. Williams.

5 A. Yes, I'm aware of what it was a little bit, yes.

6 Q. So, yes, there were cooling features in the
7 32-inch pump top display, right?

8 A. Yes. Could you -- could you explain or ask what
9 you mean by cooling features?

10 Q. Mr. Williams, the 32-inch pump top display had
11 fans, didn't it?

12 A. Yes.

13 Q. Can we take a look at JX-0093C. Mr. Williams,
14 would you agree with me that that is MRI's 32-inch pump top
15 display?

16 A. I apologize. What was the number again?

17 Q. JX-0093.

18 MS. GEYER: Can we please go on the confidential
19 record? This is MRI confidential.

20 JUDGE BHATTACHARYYA: Please take it down
21 immediately.

22 (Discussion between counsel.)

23 MR. MCCARTHY: Thank you, Your Honor, sorry
24 about that.

25 JUDGE BHATTACHARYYA: Should we go on the

1 confidential record?

2 MR. McCARTHY: We do not need to go on the
3 confidential record.

4 JUDGE BHATTACHARYYA: All right. Let's proceed.

5 BY MR. McCARTHY:

6 Q. Mr. Williams, were you able to find the
7 document?

8 A. Yes.

9 Q. Can we put up the figure first, just the
10 display.

11 JUDGE BHATTACHARYYA: I thought we weren't
12 putting it up? It is fine to put it up?

13 MR. McCARTHY: Yes. We reached agreement, Your
14 Honor. Thank you.

15 JUDGE BHATTACHARYYA: Okay.

16 BY MR. McCARTHY:

17 Q. Mr. Williams, you would agree with me that
18 that's the 32-inch pump top display?

19 A. It looks similar. Can you actually show the
20 right-hand corner where the part number is? It is -- there
21 you go, yes, thank you. So there should be a 32-inch --

22 Q. Yes, go ahead and take it down.

23 A. Thank you. That makes it easier.

24 Q. Mr. Williams, why don't we move forward.

25 I believe you testified on direct that MRI also

1 sold a 47-inch car wash display, right?

2 A. Yes.

3 Q. They were selling that car wash display at the
4 time you joined MRI, right?

5 A. Yes.

6 Q. And there have been multiple previous
7 generations of that product, right?

8 A. Correct.

9 Q. And the 47-inch car wash display that you were
10 familiar with included ambient air cooling, right?

11 A. Correct.

12 Q. And you would agree with me that it used open
13 loop cooling, right?

14 A. It used -- it brought in outside ambient air
15 through the system and exhausted it back out the top of the
16 unit.

17 Q. And then in a closed loop system, it used a
18 liquid, right?

19 A. Correct.

20 Q. It used a combination of ambient air intake and
21 outtake -- or exhaust and a closed loop, right?

22 A. Yes.

23 Q. Did it also use a heat exchanger?

24 A. It did not use a heat exchanger.

25 Q. And when I reference heat exchanger, my

1 understanding is that you believe a heat exchanger to be
2 something as simple as a plate that basically allows the
3 transfer of the heat through conduction; is that fair?

4 A. No.

5 MS. GEYER: Objection, Your Honor, outside the
6 scope of direct.

7 MR. MCCARTHY: Your Honor, I am asking
8 specifically about the 47-inch display that MRI questioned
9 him about on direct.

10 MS. GEYER: And this is also using, I believe,
11 claim terms, which Mr. Dunn is not an expert in.

12 JUDGE BHATTACHARYYA: The objection is
13 overruled.

14 BY MR. MCCARTHY:

15 Q. Mr. Williams, your understanding of the heat
16 exchanger is it could be something as simple as a plate
17 that basically allowed the transfer of the heat through
18 conduction through a plate, right?

19 A. No, I don't agree with that.

20 Q. As noted earlier, you were deposed in October of
21 2018. And, Mr. Smith, if we could bring up page 48 of that
22 deposition at lines 4 through 18.

23 Mr. Williams, do you have that deposition?
24 During that deposition, Mr. Williams, the questioner said:

25 "Question: You mentioned a heat exchanger, do

1 you recall that?

2 You answered: "Yes, I did."

3 The questioner said:

4 "Question: So just so I'm clear, in the dual
5 open loop/closed loop system, the closed loop portion --

6 "Answer: Yeah.

7 "Question: -- would transfer heat to something
8 that was, what you call, a heat exchanger?

9 "Answer: Correct. And that heat exchanger
10 could be something as simple as a plate that basically
11 allowed the transfer of the heat through conduction through
12 a plate."

13 That was your testimony then, right,
14 Mr. Williams?

15 A. That is what I said at that time.

16 Q. All right. Now, let's fast forward to 2007,
17 which seems to be an important year. I believe you
18 testified on direct that throughout all of 2007, you
19 remember MRI only selling two products; a 20.1-inch pump
20 top display and a 47-inch car wash display; isn't that
21 right?

22 A. That's the ones that I recall.

23 Q. You did some work on the 20.1 pump top display,
24 right?

25 A. Yes, I did.

1 Q. Your recollection of the 20.1-inch pump top
2 display at that time period is that it was very
3 short-lived, right?

4 A. No. Short-lived in terms of what, sir?

5 Q. The 20.1-inch product was the Gas Station TV
6 product, right?

7 A. Yes.

8 Q. And it was very short-lived, right?

9 A. No.

10 Q. Now, I did take your deposition in March of
11 2023. If we could take a look at your deposition
12 transcript at page 53, starting at line 21, going through
13 page 54, line 2.

14 MS. GEYER: We don't have a copy of that.

15 BY MR. MCCARTHY:

16 Q. Page 53, line 21 through 54, line 2. You were
17 asked at that deposition, Mr. Williams: You were asked --
18 can we do just page 53, line 21 through 54, line 2.

19 "Question: Was this transmitter and receiver
20 project ultimately used in any commercialized products?

21 "Answer: Yes.

22 "Question: Which ones?

23 "Answer: The Gas Station TV product. It was
24 very short-lived."

25 A. Yeah.

1 Q. That was your testimony, right, Mr. Williams?

2 A. Yes. Now I'm back up to speed as to why I said
3 that answer.

4 Q. That was your testimony, right, Mr. Williams?

5 A. Yes. The -- what I meant by "short-lived" --

6 Q. Mr. Williams, we're a little bit short on time
7 this week. So if your counsel has follow-up questions,
8 they will ask them.

9 JUDGE BHATTACHARYYA: Mr. Williams, your counsel
10 will be able to ask you more questions on redirect --

11 THE WITNESS: Okay. I'm sorry.

12 JUDGE BHATTACHARYYA: -- for you to explain.
13 All right?

14 THE WITNESS: All right.

15 BY MR. MCCARTHY:

16 Q. Now, let's fast forward to the end of 2007. You
17 don't even know whether MRI was outputting more or less
18 than ten units of products per month, right?

19 A. That's what I stated during my deposition,
20 correct.

21 Q. And I think you testified that what you
22 understood to be a \$5 million opportunity with the Outdoor
23 Promotions was a big one, right?

24 A. Yes.

25 Q. And also it was a unique project, wasn't it?

1 A. Yes, it was.

2 Q. You would say it was pretty cool?

3 A. I said it was -- when I saw the final
4 installation out in Las Vegas, I said that was pretty cool
5 that I was a part of that, yes.

6 Q. And part of the uniqueness of it was the size of
7 the screen, right?

8 A. Yes.

9 Q. It was far bigger than anything MRI had worked
10 with in the past, right?

11 A. Yes.

12 Q. And far bigger than anything APC had worked with
13 in the past, right?

14 A. Yes.

15 Q. Now, it is fair to say you have no idea how MRI
16 was introduced to Vertigo, right?

17 A. That is correct.

18 Q. You have no idea how MRI was introduced to
19 Outdoor Promotions, right?

20 A. Correct.

21 Q. Now, you testified on direct about what's been
22 called the whiteboard meeting. Do you remember that?

23 A. Yes.

24 Q. And you used a December 2007 e-mail to refresh
25 your recollection as to the date that that meeting

1 occurred, right?

2 A. It was an e-mail dated December 13th, 2007.

3 Q. And the whiteboard meeting that we're referring
4 to happened during the week of December 17th, 2007, right?

5 A. Yes.

6 Q. And you testified that during that meeting, Mr.
7 Dunn presented his air-to-air open loop/closed loop scheme.
8 Do you remember that?

9 A. Yes.

10 Q. Now, with respect to the finer details of that
11 meeting, it is fair to say that you don't know how long it
12 lasted, right?

13 A. That's correct.

14 Q. You don't know if it lasted two hours, four
15 hours, six hours, something else, right?

16 A. Correct.

17 Q. You don't know whether or not Mr. Bedell spoke
18 at that meeting, right?

19 A. Correct.

20 Q. You don't know whether or not you spoke at that
21 meeting, right?

22 A. That's correct.

23 Q. You don't know whether or not Mr. Bolton was
24 writing in a pen or a pencil, right?

25 A. Correct.

1 Q. You don't know what type of notebook he was
2 using, right?

3 A. Correct.

4 Q. You don't remember walking out of that meeting
5 with any key takeaways, right?

6 A. That was correct, sir.

7 Q. You don't remember whether or not Outdoor
8 Promotions was discussed at that meeting, right?

9 A. I don't recall.

10 Q. You don't know whether or not the \$5 million
11 price tag was discussed at that meeting, right?

12 A. Right.

13 Q. You don't know whether or not air-conditioners
14 were discussed at that meeting, right?

15 A. Air-conditioners were discussed. That's what
16 prompted Mr. Dunn to talk about his open loop/closed loop
17 concept.

18 Q. Can you look back at the deposition that I took
19 of you in March of 2023 at page 142, lines 17 to 19. You
20 were asked:

21 "Question: Were air-conditioners for displays
22 discussed in that meeting?"

23 And you testified: "I don't recall." That was
24 your testimony, right?

25 A. I believe there was in my deposition that I gave

1 to you, I said something about air-conditioners. And that
2 I then moved on to tell you about Mr. Dunn explaining --

3 Q. Mr. Williams, we're short on time. You were
4 asked a question: "Were air-conditioners for displays
5 discussed in that meeting of March of this year?"

6 And you responded: "I don't recall." Right?

7 A. I think I did, but I'll say I do not recall.

8 Q. You testified on direct that prior to -- well,
9 let me -- can we pull up JX-001 at Figure 9.

10 MS. GEYER: Objection, Your Honor. This is
11 definitely outside the scope. He hasn't testified to the
12 patent at all.

13 MR. MCCARTHY: Your Honor --

14 MS. GEYER: This is about a figure that he said
15 he didn't see, he doesn't know, he wasn't part of
16 prosecution. I apologize.

17 JUDGE BHATTACHARYYA: Mr. McCarthy, can you
18 explain the purpose?

19 MR. MCCARTHY: Yeah, Your Honor. This drawing
20 is, as some of us may have noticed, are kind of the focal
21 point of the whiteboard meeting that Mr. Williams testified
22 about. So I would like to clarify whether or not seeing it
23 clarifies for him what Mr. Bedell drew on the whiteboard,
24 since he testified earlier that he doesn't remember.

25 JUDGE BHATTACHARYYA: That's fine. The

1 objection is overruled as to that topic.

2 BY MR. MCCARTHY:

3 Q. Now, Mr. Williams, do you see Figure 9 on the
4 screen, right?

5 A. Yes, sir.

6 Q. You were asked during your direct examination
7 whether or not you remember what Mr. Bedell drew on the
8 whiteboard, and you said you do not remember, right?

9 A. Correct.

10 Q. Looking at this figure, Number 9, does not
11 refresh your recollection at all to what Mr. Bedell drew on
12 the whiteboard, does it?

13 A. That is correct.

14 MR. MCCARTHY: I pass the witness, Your Honor.

15 MS. GEYER: Can I please have ten seconds to
16 confer, Your Honor?

17 JUDGE BHATTACHARYYA: Yes, of course.

18 REDIRECT EXAMINATION

19 BY MS. GEYER:

20 Q. All right. Just a couple of questions for you,
21 Mr. Williams.

22 A. Okay.

23 Q. Mr. McCarthy was asking you about the project
24 you worked on with Mr. Dunn when we were still at, I
25 believe it was, Universal. Do you recall that?

1 A. Yes.

2 Q. Why did you agree to work on that circuit board
3 project for Mr. Dunn while you were still working at
4 Universal?

5 A. I have a great deal of admiration and respect
6 for Mr. Dunn, and I enjoyed doing circuit board designs.
7 And when he came to me and asked if I would do this for him
8 on the side, I simply said that I would do it pro bono. It
9 wasn't a big deal to me.

10 Q. And then switching gears, Mr. McCarthy was also
11 asking you about your testimony about the Gas Station TV
12 being short-lived. Do you remember that?

13 A. Yes. I do.

14 Q. When you were cut off, what did you want to say?

15 A. I wanted to say there were several iterations of
16 the 20.1. The first iteration was using CAT 5 cable to
17 transfer video from a player in a store out to a display,
18 the double-sided display, and then we would -- I had a
19 circuit that would reclock the information. And we could
20 daisy chain that CAT 5 signal cable from unit to unit to
21 unit, so we could have up to 8, 16 displays on gas pump
22 type units.

23 That was short-lived because GS TV came to
24 realize that the cost of trenching to bury a CAT 5 cable
25 from the store out to the pump, and then from pump to pump

1 to pump was not cost-effective.

2 So GS TV asked us to see if we could come up
3 with another solution, which we did. We trans -- if I am
4 going too long, just cut me off.

5 Q. You can finish the answer however you want.

6 A. So we ended up, the final solution was MRI
7 designed, developed, and built our own wireless system to
8 transfer audio, video, and communication from a unit in the
9 store out to the multiple displays, and that GS TV just
10 loved that final solution that we did. And we produced
11 thousands of units.

12 So to call it short-lived was very misleading.

13 Q. Going back to the whiteboard meeting, you were
14 also asked if you remember the notebook Mr. Bolton was
15 using. And you didn't recall, correct?

16 A. That is correct.

17 Q. You also were asked if Mr. Bolton used a pen or
18 pencil, right?

19 A. Correct.

20 Q. Why do you recall certain things about the
21 meeting but not whether Mr. Bolton was using a pen or
22 pencil?

23 A. Again, my -- when Mr. -- when I'm in meetings
24 with Mr. Dunn, I typically like to just sit and observe.
25 And I guess I was looking at Mr. Bolton in this, the state

1 of my mind because this was a novel idea that Mr. Dunn was
2 presenting. And I was waiting to see some type of reaction
3 from a person to say, like, the lightbulb clicking on: Oh,
4 this really is a fantastic idea.

5 And instead of that, he seemed more occupied at
6 trying to copy or dictate or do something in his notebook
7 and constantly staring at the whiteboard versus just
8 focusing on Mr. Dunn's explanation of the open and closed
9 loop.

10 MS. GEYER: I have no further questions.

11 JUDGE BHATTACHARYYA: Thank you. Anything
12 further, Mr. McCarthy?

13 MR. MCCARTHY: Nothing further, Your Honor.

14 JUDGE BHATTACHARYYA: Thank you for your time,
15 Mr. Williams. You may step down.

16 (The witness stood down.)

17 JUDGE BHATTACHARYYA: Why don't we take an
18 afternoon break before the next witness. We're in recess
19 for 15 minutes.

20 (A recess was taken at 3:35 p.m., after which
21 the proceedings resumed at 3:52 p.m..)

22 MS. GEYER: Good afternoon again, Your Honor.

23 JUDGE BHATTACHARYYA: Good afternoon.

24 MS. GEYER: MRI is going to call Mr. Alan Brand
25 to the stand. And I have demonstratives, if you would like

1 a copy of those.

2 JUDGE BHATTACHARYYA: Yes, please.

3 Good afternoon.

4 THE WITNESS: Good afternoon.

5 JUDGE BHATTACHARYYA: Would you please raise
6 your right hand, Mr. Brand.

7 Whereupon--

8 ALAN BRAND,

9 having been first duly sworn/affirmed, was examined and
10 testified as follows:

11 THE WITNESS: I do.

12 JUDGE BHATTACHARYYA: Thank you.

13 DIRECT EXAMINATION

14 BY MS. GEYER:

15 Q. Good afternoon, Mr. Brand.

16 A. Good afternoon.

17 Q. Can you please introduce yourself to the Court.

18 A. My name is Alan Brand. I am the chief financial
19 officer of Manufacturing Resources International.

20 Q. When did you join MRI?

21 A. October 2021.

22 Q. Have you been CFO since you joined in October
23 '21?

24 A. Yes, I have.

25 Q. At a high level, what are your job

Heritage Reporting Corporation
(202) 628-4888

1 responsibilities as CFO?

2 A. So currently I oversee all of accounting,
3 finance, HR, IT infrastructure, and really corporate
4 administration.

5 Q. What type of work is performed by your finance
6 and accounting teams?

7 A. So this is more of the day-to-day type of
8 accounting. So we have got billing clerks, we have
9 invoicing-and-supplier-matching clerks. We do day-to-day
10 accounting transactions, all the treasury function, the
11 month-end close, the financial reporting, and the
12 coordination on the audit and tax requirements that we
13 have.

14 Q. Please give us a brief overview of your
15 educational background before joining MRI.

16 A. So I have a Bachelor's in Business
17 Administration, with a major in accounting and a minor in
18 finance from Kennesaw State University. Grad school at
19 Duke University, with a concentration in international
20 business and international financial reporting. And I also
21 hold two Six Sigma belts.

22 Q. What are Six Sigma belts?

23 A. These are certifications that concentrate on
24 process improvement. Mine were specifically geared towards
25 lean manufacturing. So they help identify holes in

Heritage Reporting Corporation
(202) 628-4888

1 processes, areas where improvements can be, to try to
2 streamline things in a vertically integrated manner.

3 Q. How would you describe MRI's business?

4 A. So it's a domestic fully vertically integrated
5 manufacturing company.

6 Q. What do you mean by "fully vertically
7 integrated"?

8 A. From the standpoint that everything from the
9 beginning of the process, the engineering and design, the
10 metal fabrication, the weld, the assembly, all the cuts,
11 all the way up and to the point of the product shipping to
12 the end customer is all done within our facility in
13 Alpharetta, Georgia.

14 Q. As CFO, how are you familiar with MRI's
15 manufacturing activities?

16 A. So every week I make an effort to spend a few
17 hours out in the facility, on the floor, with different
18 groups. Being the guy that is responsible for overseeing
19 the numbers, seeing it move through a spreadsheet or a
20 system is one thing, but to see how it truly moves
21 operationally on the floor is actually quite helpful.

22 And it's also good because you can learn new
23 things, offer help where it may be needed. But, again,
24 it's to give better context of the number side.

25 Q. And approximately how large is the production

1 facility?

2 A. Approximately 220,000 square feet.

3 Q. So I would like us to briefly walk through MRI's
4 processes from engineering and design through delivery and
5 services.

6 What happens when you first receive a request
7 from a customer?

8 A. So when MRI receives a request, there's an
9 internal collaboration with the business development team,
10 some of the engineers, it could be with some of the
11 production operators. And what they are going to do is
12 look at what the ask from the customer is, want to start to
13 develop what materials may be needed, what specs there are,
14 is it something that we can, in fact, design and engineer.

15 And then once that's complete, we would then
16 generate, you could call it, a standard quote that would
17 then go to the customer, for the customer to review and
18 accept if it met their requirements.

19 Q. And once a customer reviews and accepts it, what
20 happens next?

21 A. They would then, in turn, issue a purchase
22 order.

23 Q. And when MRI receives a purchase order, what
24 happens next?

25 A. Internally, we hold what we call a purchase

Heritage Reporting Corporation
(202) 628-4888

1 order acceptance meeting, where we take the purchase order
2 from the customer and compare it to the quote that we
3 issued to the customer, to make sure that everything lines
4 up and that we are going to accept and begin work on what
5 was actually sold to them.

6 Q. And when you say "begin work" on it, do you mean
7 the product goes into production?

8 A. It would go on to the production schedule.
9 Pending where we are with backlog of work would be when the
10 actual production would start.

11 Q. Have you prepared demonstratives or slides that
12 show certain aspects of production?

13 A. I have.

14 Q. All right. If you could please turn or look at
15 the top documents. Are those the slides that you prepared?

16 A. Yes, they are.

17 Q. And are the images shown in slides 2 through 9
18 the same images that you submitted with your declaration
19 with the Complaint?

20 A. Yes, they are.

21 Q. Mr. Brand, if you could please walk us through
22 what is shown on slides 2 through 9.

23 JUDGE BHATTACHARYYA: Ms. Geyer, we're on the
24 public record.

25 MS. GEYER: Yes, this is all fine on the public

1 record. Thank you.

2 JUDGE BHATTACHARYYA: All right.

3 THE WITNESS: So slide 2, this is what we refer
4 to as the SMT circuit board area. This is where we would
5 manufacture, assemble, produce the circuit boards that go
6 into the units that we make.

7 Slide 3, so this picture on the left is our
8 laser metal cutter. So the sheets of metal that are used
9 as part of the fabrication and build of the unit, the laser
10 is programmed to cut these to spec. So it's a highly
11 automated and very neat process to watch.

12 The one on the right there, the metal bending
13 press, again, this is going to bend any metal needed on
14 that unit. Again, some have rounded edges, some -- one may
15 have a rounded edge and the other may be a straight edge,
16 but it's the arm to do so.

17 Slide 4, so these are the two robotic arms.
18 These will manually pick up these sheets of metal. And
19 what they do is they start to thread the metal for what we
20 refer to as the hardware insertion. So these may be really
21 little screws that get, I will say, pushed into these
22 units.

23 And on slide 5, this is the automated powder
24 coat line. So part of one of the offerings that comes with
25 the order is you can pick the paints you want, the color of

1 the paint, this, that, and the other. But within this
2 picture here, it is going to be touchless, and it's going
3 to go through -- the paint is going to get -- you can kind
4 of say through an oven, and then it is going to come out
5 through a cooler, it gets washed, and then it is going to
6 come out and go into the next phase.

7 The next slide, this is our glass fabrication
8 area. So this is where the glass -- we're going to take
9 sheets of glass, start to cut to spec and fabricate based
10 on the customer's request.

11 Slide 7, you see more people here. So this is
12 an area where they are assembling the LCD tiles in part of
13 the unit. And this is a more hands-on, very precise-type
14 approach that has to occur. It is done within what we call
15 a clean room.

16 And then, last, on 8, this is -- we refer to it
17 as our testing area. And we conduct a handful of tests,
18 whether it be software, pressure tests. And what you see
19 here is the water test. These go outside, these things are
20 put in this little shower area, and drenched in water. And
21 if it gets through and passes the test, it will go to the
22 next slide, which is our crating and packaging area.

23 So along with the customer order, the engineers
24 also have to design the crate and structure that they will
25 be shipped and transported in. So we have our own wood

1 shop. And what they do is cut this and assemble this.
2 Once the unit gets through, it would then get packaged and
3 crated and be ready to ship upon a customer's request.

4 MS. GEYER: Your Honor, at this time we need to
5 go on the MRI CBI record.

6 JUDGE BHATTACHARYYA: Moving on to the MRI
7 confidential record.

8 (Whereupon, the hearing proceeded in
9 confidential session.)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 O P E N S E S S I O N

2

3 MR. MACHLEIDT: Your Honor, may I approach the
4 stand with the witness binder?

5 JUDGE BHATTACHARYYA: Yes, of course, please.

6 Good afternoon, Mr. Brown.

7 THE WITNESS: Good afternoon.

8 JUDGE BHATTACHARYYA: Would you please raise
9 your right hand.

10 Whereupon--

11 MICHAEL BROWN,
12 having been first duly sworn/affirmed, was examined and
13 testified as follows:

14

15 THE WITNESS: Yes, I will.

16 JUDGE BHATTACHARYYA: Thank you.

17 MS. ANDERSON: Good afternoon. My name is Andie
18 Anderson, counsel for Complainant. We have some
19 demonstrative slides today. Would you like a copy of them?

20 JUDGE BHATTACHARYYA: Yes, please.

21 MS. ANDERSON: And Counsel, they are in your
22 binder.

23 May I approach?

24 JUDGE BHATTACHARYYA: Yes.

25 DIRECT EXAMINATION

1 BY MS. ANDERSON:

2 Q. Good afternoon, Mr. Brown. Could you please
3 introduce yourself to the Court.

4 A. Good afternoon, Your Honor. My name is Mike
5 Brown. And I'm VP of mechanical engineering for MRI.

6 Q. Mr. Brown, how long have you been the vice
7 president of mechanical engineering at MRI?

8 A. I have held this role since 2017.

9 Q. Have you had any other roles at MRI before
10 becoming vice president of mechanical engineering?

11 A. Yes. When I was hired at MRI, my title was
12 manager of mechanical engineering. And in 2014, I was
13 promoted to director of mechanical engineering. And then
14 in 2017, promoted to my current role.

15 Q. What professional experience did you have before
16 joining MRI?

17 A. I have held a few engineering jobs since I
18 graduated with my Bachelor's in Mechanical Engineering in
19 '99. And in all of these roles, I was doing mechanical
20 engineering and design of electronic products.

21 The first one, Toshiba America, consumer
22 products, designing consumer televisions. That was
23 followed by a job at Motorola, where the product was
24 battery packs and chargers for military two-way radios.
25 That was followed by a job at American Panel Corporation,

Heritage Reporting Corporation
(202) 628-4888

1 where the product was ruggedized LCD display assemblies for
2 military aircraft and ground vehicle.

3 After that, I took a job with Radiant Systems,
4 where the product was interactive displays for
5 point-of-sale systems. And then I came to MRI.

6 Q. You mentioned a Bachelor's degree. Do you have
7 any other postsecondary degrees that you use in your role
8 as the vice president of mechanical engineering?

9 A. Yes. So my Bachelor's degree was in '99. That
10 is from Tennessee Tech. Then in 2004, I got my Master's
11 Degree in Mechanical Engineering from Georgia Tech.

12 Q. Let's go back to your work as the vice
13 president. What are your responsibilities within this role
14 at MRI?

15 A. So I oversee a team of mechanical engineers who
16 are responsible for the mechanical engineering and design
17 of new generations of the MRI product. Also for overseeing
18 this team of engineers as we introduce those new product
19 into manufacturing. And also overseeing the team of
20 engineers as we design new variations of the product.

21 Q. You mentioned the design of new generations of a
22 product. Can you walk us through what happens during the
23 design and development process of a new generation of
24 products at MRI?

25 A. Yes. So the design of a new generation of the

1 BoldVu product is a big team effort. It would begin with a
2 kickoff meeting, where we would have all the interested
3 parties at MRI, all the engineering disciplines, mechanical
4 engineers, electrical engineers, the optical engineers,
5 software engineers.

6 We would also have folks from our operations and
7 manufacturing. We would also have program managers and
8 customer service, so we can integrate customer feedback.

9 And with all those parties together, we kind of
10 list out all the design goals of the new product, the new
11 features, the improvements, all that. That's also the
12 setting where Bill Dunn would come and download kind of his
13 ideas that he has been working on. And so we would have
14 brainstorming sessions and whiteboard sessions.

15 And after a meeting like that has concluded, we
16 continue into the really hard-core engineering design. And
17 the first step of that would be the design of the cooling
18 system.

19 And so that would be primarily carried out in
20 computational fluid dynamics. We would have at least one
21 engineer doing the CFD simulations. That process kind of
22 initiates by creating a CAD model of the product, importing
23 that into the CFD software. And then we begin iterating
24 through the design, which is a months-long process where we
25 figure out things like fan placement and the number of

1 fans, layers of heat exchangers, things like that.

2 After the cooling system design is settled, it
3 moves on into more of a detail design phase. And the
4 engineers will then basically design all the details of the
5 product, all the attachments, and just figure out all those
6 details until we have a CAD model that represents the
7 product ready to be manufactured.

8 Q. You mentioned some technical terms I want to
9 learn more about. What is a CAD model?

10 A. So "CAD" stands for computer-aided design. And
11 at MRI we use 3D CAD. So when I talk about our CAD models,
12 I'm talking about 3D CAD models.

13 Q. And you mentioned CFD simulations. What are
14 those exactly?

15 A. So "CFD" stands for computational fluid
16 dynamics. And essentially, that is the software where we
17 simulate all the airflow in the product. We model the
18 product geometry by the CAD model. We apply thermal loads,
19 like all of the thermal loads that come from, you know,
20 electrical power dissipation, heat from the sun, is all
21 modeled. Fans that are in there, their performance curves
22 are applied.

23 And basically with that model -- and then we
24 assign materials to physical bodies and air and things like
25 that. Then we basically run a simulation. It takes, in

1 our case, about a day to run. And then daily we would have
2 results to discuss.

3 Q. And you mentioned part of your role is to
4 oversee variations. How is the design and development of a
5 variation different from a generation?

6 A. So the variations of the product or the variants
7 of the product are essentially where we adapt or customize
8 a product to fit into various applications or sites. The
9 example that I like to use is bus stops all around the
10 world.

11 So, for example, we have some 86-inch displays
12 in these bus stops in D.C. But if we take that same
13 display and we need to fit it into Philadelphia, there's
14 differences. Bus stops are normally varying heights. So
15 we might need to do a structural design to raise it up.
16 Like the stand would be raised up.

17 Some bus stops in some cities, the roof is
18 attached to our display and it has to hold the snow load or
19 whatever. And so there's a structural design there. If
20 we're in Miami, there's hurricane wind loads that are
21 structural designs.

22 So these are the kind of customizations I'm
23 talking about.

24 Q. And when you develop a new variation, do you
25 alter the cooling system within the generation?

1 A. No. So the variants that are customizations for
2 different sites, the cooling systems are the same.

3 Q. And during this design and development phase,
4 what do you personally do in your role?

5 A. So I am managing the team of mechanical
6 engineers. I like to describe my personal involvement as a
7 coaching role.

8 So I mentioned we would have -- when we design
9 the cooling system, we're looking at results daily. We
10 would talk through issues. So if we see temperatures that
11 are too high, that are going to cause a problem, we would
12 talk about: Do we move fans? Do we add heat exchanger
13 layers? Things like that.

14 So talking through the difficulties and then
15 deciding what's the next iteration. Also on the CAD
16 modeling side of things, when we are just designing
17 details, some of these structural problems, I'm helping to
18 talk through those challenges, too, and figure out next
19 steps.

20 Q. Mr. Brown, do you understand that MRI has
21 presented 24 of its products as domestic industry products
22 in this case?

23 A. I understand that.

24 Q. What are the names of those products?

25 A. So I can't list out all of these by memory, but

1 I have some lists in some slides where this is listed out,
2 if we could show that.

3 Q. Can we bring CDX-5 up.

4 Is this that list?

5 A. Yes. So this is a list of 24 generations and
6 configurations of the MRI domestic industry.

7 Q. And Mr. Brown, who gathered this list of
8 products?

9 A. I made this list.

10 Q. And how did you select what products go on this
11 list?

12 A. So this is essentially a list of all the gens
13 and configs that MRI has sold since 2019.

14 MS. ANDERSON: Your Honor, this next bit gets
15 into MRI's confidential business information. I would like
16 to go on the confidential record, please.

17 JUDGE BHATTACHARYYA: We're moving on to the MRI
18 confidential record.

19 (Whereupon, the hearing proceeded in
20 confidential session.)

21

22

23

24

25

1 O P E N S E S S I O N

2 BY MS. ANDERSON:

3 Q. Mr. Brown, let's switch gears here. Are you
4 familiar with any other companies that produce outdoor
5 electronic displays?

6 A. Yes, I'm aware of Samsung's outdoor displays,
7 their OH series.

8 Q. Have you ever seen a Samsung OH series display?

9 A. I have. Just about a week and a half ago, I did
10 a site review of bus stops in Las Vegas, where I saw quite
11 a few Samsung OH85 displays installed in those.

12 Q. What were you doing during that site visit at
13 Las Vegas?

14 A. So we have a contract to install BoldVus in the
15 Las Vegas bus stops, 33 of those to start. And so we're
16 going to be removing Samsung displays and installing
17 BoldVu.

18 Q. Prior to a week and a half ago, have you ever
19 seen any Samsung OH series displays?

20 A. I have. I have participated in teardown of
21 three OH displays: the OH58, OH46, and OH55.

22 Q. Where did you disassemble these Samsung
23 displays?

24 A. This was done at MRI.

25 Q. And what happened to those displays after they

Heritage Reporting Corporation
(202) 628-4888

1 were torn down?

2 A. So the 85, after we tore it down it remained at
3 MRI. The 46, it is not at MRI. I don't know where that
4 went. And then the 55 remained at MRI after the teardown.

5 Q. And is that 85 and 55 displays, the displays you
6 see here in the Court today labeled CPX-5 and CPX-6?

7 A. Yes, so it's these two right here in the
8 courtroom.

9 Q. Did you ever see the crating and delivery of
10 those displays to this courtroom?

11 A. Yes, I personally participated in that and
12 oversaw that effort.

13 Q. Mr. Brown, please turn to tab CX-280 in your
14 binder.

15 And, Mr. Goodin, if you could bring that up and
16 go to page 2.

17 Mr. Brown, what do we see in the images?

18 A. Okay. CX-0280, so these are pictures of the
19 teardown of the OH46.

20 Q. Were you present when these pictures were taken?

21 A. Yes, I was there.

22 Q. And do they accurately reflect what you observed
23 during the teardown of the OH46?

24 A. Yes, they do.

25 Q. Mr. Brown, please take a look at tab CX-275 in

1 your binder.

2 Mr. Goodin, if you could please bring that up as
3 well and go to page 2.

4 A. Okay. I am looking at CX-0275.

5 Q. Mr. Brown, were you present when these pictures
6 were taken?

7 A. Yes, I was.

8 Q. What are these pictures?

9 A. So these are pictures from the teardown of the
10 OH85.

11 Q. And did they accurately reflect what you
12 observed when you tore down the OH85?

13 A. Yes, they do.

14 Q. I want to go to page 3 and take a look at the
15 top left picture.

16 A. Okay.

17 Q. Mr. Brown, what do we see in this image?

18 A. So when we began this teardown -- first of all,
19 I should mention that when we received this OH85, there was
20 no cover glass on the front. So we basically brought this
21 into a room, we powered it up, because we wanted to see the
22 fans running. And we noted that there was some airflow
23 happening between the top of the LCD and the top of the
24 framework.

25 So what we did, we took a tissue and we held it

1 up to that, that air, and we saw the tissue being blown
2 back. So essentially, from that, we understood that air
3 was coming out of that gap.

4 Q. And taking a look at the image on the top right,
5 Mr. Brown, what do we see occurring in this image?

6 A. Similar to the top, we could tell some airflow
7 was going on down there. And so we took the same tissue
8 and kind of held it up to that gap and observed that being
9 sucked into that gap between the LCD and the framework
10 there. And essentially from that, we understood that air
11 was going into the product there.

12 Q. And, Mr. Goodin, could you go to page 3 with the
13 top left image -- page 4 with the top left image of CX-275.

14 Mr. Brown, what do we see occurring in this
15 image?

16 A. So after we did that little tissue test -- which
17 when we did the tissue test, it is worth mentioning that we
18 hadn't disassembled anything at that point. So the back
19 covers were on. But like I mentioned, there was no cover
20 glass.

21 Then we wanted to see basically what was
22 happening with air flows after we removed the back cover.
23 So in this picture, what we noted was there was a plate
24 where all these circuit boards were mounted. And there's
25 some openings in that plate. So that little opening that

1 is illustrated there, it is kind of a few inches below that
2 heat exchanger, we noted there is some airflow there.

3 So we took a little strip of tissue, held it up
4 to that gap. So there's a gap between the plate holding
5 the PCBs and the next plate forward, which is the back of
6 the LCD module or the back of the backlight. Holding that
7 tissue in there, it was sucking the tissue upward. So from
8 that we understood that there was flow there going upward.

9 Q. Mr. Brown, did you disassemble this OH85 further
10 from the images shown in CDX-275?

11 A. Yes, I did.

12 MS. ANDERSON: Your Honor, I would like to ask
13 permission for the witness to leave the stand to approach
14 CPX-5 and walk us through what he did to tear this down
15 even further?

16 THE COURT: That's fine. Please go ahead.

17 BY MS. ANDERSON:

18 Q. You may need to speak loudly, Mr. Brown.

19 A. I will try.

20 Q. Walk us through how you tore down this display
21 further from what we just saw in the images.

22 A. So I think the last picture we were looking at,
23 there were two heat exchangers installed. So we removed
24 the remaining heat exchangers.

25 So the heat exchangers were taken out by

1 removing these brackets here. And then there's another
2 plate here. So these two plates. And then that exposes
3 some screws in the heat exchanger, so top, the bottom. So
4 we took those screws out, take the heat exchangers out.

5 After that, this plate -- this was a plate I'm
6 talking about with all the circuit boards mounted on it.
7 We removed screws surrounding that thing and -- so we could
8 then unplug some cables and take that out and set it aside.

9 With that plate off, it exposes a bunch of
10 screws around the perimeter that's for fastening the LCD
11 module. So we took out all those screws. Then we could
12 remove the LCD module, and we laid it on a table with the
13 LCD facing up.

14 And after that, you can't exactly see it here
15 but there's some black parts that retain the LCD. There is
16 a lot of screws in there. So we removed those screws.
17 There is four of these black parts, took those off. And
18 then the LCD is free to be removed.

19 So we lifted out the LCD and the optical films,
20 those come out together, and laid that aside. And then at
21 that point of assembly, you can see the LED backlight.

22 Q. And before you reassembled it to be in the state
23 that we see here in the court, did you save any pieces of
24 the backlight that you observed?

25 A. We did. So before we put it back together, we

1 removed two of the LED backlight boards, and we kept those
2 out.

3 Q. Can you please hold one up for the Court?

4 A. So here is one of them.

5 Q. Can you hold that so the Judge can see it?

6 A. I'm sorry.

7 Q. Mr. Brown, what are all the little dots on it?

8 A. So all these little dots, those are the LEDs.

9 Q. And what is the white film behind the LEDs?

10 A. So this white film, it is a reflective film.
11 And we started peeling that back.

12 Q. What was beneath the white reflective film?

13 A. So when you peel back the reflective film,
14 you're able to see this printed circuit. And that circuit
15 is basically on this metal substrate.

16 Q. Does MRI use similar backlight tiles such as the
17 one that you're holding right now?

18 A. Yes. Actually, ours are quite similar.

19 Q. What do you refer to them in your work at MRI?

20 A. This is a metal core PCB.

21 MS. ANDERSON: Let me confer with my counsel for
22 ten seconds, please, Your Honor?

23 (Pause.)

24 MS. ANDERSON: I have no further questions for
25 the witness. You can return to the stand. And I pass the

1 witness.

2 JUDGE BHATTACHARYYA: Okay. Thank you. It is
3 5:23. We are going to adjourn for the day. Thank you very
4 much. I will see you tomorrow morning.

5 (Whereupon, at 5:23 p.m., the hearing recessed,
6 to reconvene at 9:30 a.m. on Tuesday, June 27, 2023.)

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Heritage Reporting Corporation
(202) 628-4888

1 C O N T E N T S

2

3	WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
4	WILLIAM DUNN	42	105	160	
5	DAVID WILLIAMS	167	180	199	
6	ALAN BRAND	203	219	223	
7	MICHAEL BROWN	226			

8

9 AFTERNOON SESSION: 134

10

11 CONFIDENTIAL SESSIONS

12 50 - 104

13 211 - 225

14 234 - 263

15

16

17

18

19

20

21

22

23

24

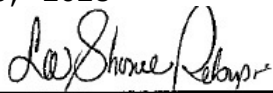
25

Heritage Reporting Corporation
(202) 628-4888

1 CERTIFICATE OF REPORTER
2 TITLE: Certain Outdoor and Semi-Outdoor Electronic
3 Displays
4 INVESTIGATION NO: 337-TA-1331
5 HEARING DATE: June 26, 2023
6 LOCATION: Courtroom A
7 NATURE OF HEARING: Evidentiary Hearing

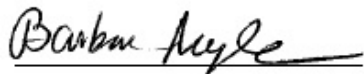
8 I hereby certify that the foregoing/attached
9 transcript is a true, correct and complete record of the
10 above-referenced proceedings of the U.S. International
11 Trade Commission.
12 Date: June 26, 2023

11 SIGNED:


Signature of the Contractor of the
Authorized Contractor's Representative
1220 L Street, N.W., Suite 206
Washington, D.C. 20005

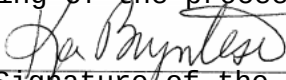
14 I hereby certify that I am not the Court
15 Reporter and that I have proofread the above-referenced
16 transcript of the proceedings of the U.S. International
17 Trade Commission, against the aforementioned Court
18 Reporter's notes and recordings, for accuracy in
19 transcription in the spelling, hyphenation, punctuation and
20 speaker identification and did not make any changes of a
21 substantive nature. The foregoing/attached transcript is a
22 true, correct and complete transcription of the
23 proceedings.

20 SIGNED:


Signature of Proofreader

21 I hereby certify that I reported the
22 above-referenced proceedings of the U.S. International
23 Trade Commission and caused to be prepared from my tapes
24 and notes of the proceedings a true, correct and complete
25 verbatim recording of the proceedings.

24 SIGNED:


Signature of the Court Reporter

Heritage Reporting Corporation
(202) 628-4888