

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Case: IPR2025-01309

-----X
SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.

Petitioners

v.

MAXELL, LTD.,
Patent Owner
-----X

*** CONFIDENTIAL ***

DEPOSITION

OF

R. JACOB BAKER

FRIDAY, APRIL 17, 2026

HELD REMOTELY

Reported by:
Candida Borriello
Stenographic Court Reporter
Job No. 7119830-001

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

DATE: April 17, 2026
TIME: 11:56 a.m. (Eastern Time)

Deposition of R. JACOB BAKER, held
REMOTEY, before Candida Borriello,
Stenographic Court Reporter and Notary
Public of the State of New York.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S:

Appearing on Behalf of Samsung Electronics
Co., LTD. and Samsung Electronics America,
Inc.:

MAYER BROWN LLP
1999 K Street, NW
Washington, DC 20006-1101
(202) 263-3015
BY: SETH W. BRUNEEL, ESQ.
EMAIL: Sbruneel@mayerbrown.com

Appearing on Behalf of Maxell, LTD.:

DLA PIPER
444 West Lake Street
Chicago, Illinois 60606
(312) 368-2127
BY: CHRIS KATSANTONIS, ESQ.
EMAIL: chris.katsantonis@us.dlapiper.com

- and -

DLA PIPER
3203 Hanover Street
Suite 100
Palo Alto, California 94304-1123
BY: ALAN LIMBACH, ESQ.
EMAIL: alan.limbach@us.dlapiper.com

1 J. Baker - Confidential

2 THE COURT REPORTER: We're on the
3 record.

4 R U S S E L J A C O B B A K E R,
5 called as a witness, having been
6 duly sworn by a Notary Public,
7 was examined and testified as
8 follows:

9 EXAMINATION BY

10 MR. BRUNEEL:

11 Q. Good morning, Dr. Baker. My name
12 is Seth Bruneel. I represent Maxell in this
13 case. Can you please state your full name?

14 A. Russell, R-U-S-S-E-L; Jacob,
15 J-A-C-O-B; Baker, B-A-K-E-R.

16 Q. Thank you. And where are you
17 testifying from today?

18 A. My home in Las Vegas, Nevada.

19 Q. Is there anyone in the room with
20 you today?

21 A. No.

22 Q. Did you bring any notes with you or
23 materials?

24 A. No.

25 Q. Dr. Baker, have you been deposed

1 J. Baker - Confidential

2 before?

3 A. Yes.

4 Q. About how many times?

5 A. This is the 123rd time.

6 Q. And when was the most recent

7 deposition?

8 A. In Chicago around March 20th if

9 memory serves.

10 Q. So last month?

11 A. Yes.

12 Q. Is there any reason that you would

13 not be able to testify truthfully today?

14 A. No.

15 Q. And today we're speaking regarding

16 IPR U.S. patent number 7,577,417. Is that

17 your understanding?

18 A. The '417 patent, yes.

19 Q. So if we're referring to the

20 '417 patent, we're both referring -- so we

21 can call it the '417 patent to make it easy

22 on us?

23 A. Yes.

24 MR. KATSANTONIS: Seth, real

25 quickly to enter myself.

1 J. Baker - Confidential

2 Chris Katsantonis, along with my
3 colleague Alan Limbach from DLA Piper
4 representing petitioners and the
5 witness.

6 Q. All right. I'm going to try and
7 drop an exhibit in the chat for you.

8 (Exhibit 1003, Previously marked,
9 was introduced.)

10 BY MR. BRUNEEL:

11 Q. Dr. Baker, let me know when you can
12 open that. It should be your Declaration,
13 Exhibit 1003.

14 A. I have it.

15 Q. Okay. And do you recognize this
16 document?

17 A. Yes.

18 Q. And if we turn to the very last
19 page, page 66 of the PDF. Let me know when
20 you're there.

21 A. I'm there.

22 Q. Is that your signature on the last
23 page?

24 A. Yes.

25 Q. And it's dated August 28, 2025; is

1 J. Baker - Confidential

2 that right?

3 A. Yes.

4 Q. When did you start preparing this
5 Declaration?

6 A. I don't clearly recall. If I had
7 to guess I would say July of 2025.

8 Q. And who asked you to prepare this
9 Declaration?

10 A. I was engaged by DLA Piper on
11 behalf of Samsung.

12 Q. And in preparing this Declaration,
13 did you speak with anyone from Samsung rather
14 than DLA?

15 A. No.

16 Q. Did you speak with anyone who is
17 not an attorney?

18 A. No.

19 Q. So on page 6 of the PDF, I'm
20 looking at paragraph two. Let me know when
21 you have that in front of you.

22 A. I'm there.

23 Q. There you say:

24 I currently hold the opinions set
25 forth in this Declaration.

1 J. Baker - Confidential

2 Is that still the case?

3 A. Yes.

4 Q. Have any of your opinions changed?

5 A. Not that I can think of.

6 Q. All right. Let's talk about your
7 background. You started working as an
8 engineer in 1985; is that right?

9 A. Yes.

10 Q. And that was at EG&G Energy
11 Measurements; is that right?

12 A. I worked for Reynolds Electrical
13 Engineering Company before that in the summer
14 of 1985 as an engineering intern.

15 Q. Okay. And what did you do as an
16 engineering intern at that time?

17 A. During that time was the Star Wars
18 era. And it was during Reagan's presidency,
19 and there was a lot of money being spent on
20 the strategic defense initiative,
21 colloquially known as Star Wars. And I
22 worked troubleshooting electrical problems on
23 mining equipment.

24 Q. Anything else?

25 A. Some drafting. I did some computer

1 J. Baker - Confidential

2 work with a VAX computer and some database of
3 things.

4 Q. What do you mean by computer work?

5 A. If memory serves, I was organizing
6 information on a computer. I wrote a program
7 that would allow them to save information,
8 like, when things were maintained and work
9 that was being done. At that point
10 everything was still done with pencil and
11 paper, and I had some programming knowledge
12 that allowed me to provide some software that
13 they could use for entering things
14 electronically.

15 Q. So after Reynolds Electrical
16 Engineering Company, where did you work?

17 A. Then in the fall of '85 or winter
18 maybe, I got a position as an engineer at
19 EG&G Energy Measurements, which was in
20 Las Vegas rather than out of the Nevada test
21 site.

22 Q. And what did you do at EG&G Energy
23 Measurements?

24 A. I designed instruments for nuclear
25 diagnostic tests.

1 J. Baker - Confidential

2 Q. Did you design any products that
3 consumers would be familiar with?

4 A. All of the designs I did there were
5 considered not consumer projects, they were
6 for nuclear testing.

7 Q. And then from there you went to
8 Micron; is that right?

9 A. I went to Lawrence Livermore
10 National Lab for a bit and worked on impulse
11 radar and diagnostic instrumentation for the
12 national ignition facility. I worked in
13 Livermore. And then I received -- where I
14 got a position as assistant tenure track
15 professor at the University of Idaho. And
16 then at that time University of Idaho was
17 trying to establish connections with Micron.

18 And so in the summer of '94, I went
19 to work at Micron as a design engineer or
20 faculty engineer or something like that, and
21 that's the first time I worked on consumer
22 products.

23 Q. What type of consumer products did
24 you work on?

25 A. In '94, '95 I worked on RFID tags,

1 J. Baker - Confidential

2 I worked on displays, I worked on DRAM
3 memory. And that's D-R-A-M.

4 Q. So those are kind of components of
5 consumer devices?

6 A. Generally, yes, the tags themselves
7 were. I designed -- I worked on the design
8 of the chip, but they had a little battery
9 and antenna. And this was a point where they
10 were trying to be able to do inventory
11 quickly by just having an RFID tag on a
12 package, but my work was in the CMOS design
13 portion of the tag, not the battery or
14 antenna design.

15 Q. And what does CMOS stand for?

16 A. Complementary
17 metal-oxide-semiconductor. It's a technology
18 used for integrated circuit chip fabrication.

19 Q. Did you work on mobile devices at
20 Micron?

21 MR. KATSANTONIS: Objection.
22 Form.

23 A. Well, yes. The components I worked
24 on were all slated, not all, but DRAM would
25 gone on into desktop systems. But the other

1 J. Baker - Confidential

2 ones were components in mobile devices such
3 as a helmet for a pilot with a display in it.
4 Or, you know, to the extent a RFID tag is --
5 I mean, that's mobile 'cause it has to go on
6 a package that's moving, but I worked on
7 components that would be used in mobile
8 devices.

9 BY MR. BRUNEEL:

10 Q. And where were you working at the
11 time of the priority date of the patent which
12 was around April 3, 2002?

13 A. In 1999 I transitioned to a new
14 engineering program at Boise State
15 University, and I had been working for, I
16 don't remember clearly, Tower Semiconductor
17 in Israel. I worked for Rendition, which is
18 a GPU, they made GPUs. I still work doing
19 stuff at Micron.

20 I worked for a company called
21 AmKor, which is a packaging company. But
22 I -- they were trying to get involved with
23 a -- start semiconductor fabrication
24 facility, so they hired me to work with their
25 engineers to get things up and running.

1 J. Baker - Confidential

2 They'd bought, if memory serves, fabrication
3 facilities from National Semiconductor in
4 South Korea and were turning those into
5 pure-play foundries for customers to
6 fabricate chips.

7 But I did a lot of consulting in
8 that time frame. That was right after my
9 first book was published, and I -- people, I
10 mean that was when people still bought books.
11 Although I just bought one yesterday, so I
12 guess people still do buy books. And it was
13 a best seller. So, I got contacted a lot for
14 consulting, so there's probably other
15 consulting gigs, I'm just not remembering
16 right now.

17 Q. At this time were you working on
18 any cell phone hardware?

19 A. The memory, this was the time
20 when -- so I led, actually, the development
21 of the Double Data Rate DRAM, at Micron in
22 the late '90s, early 2000s. And in the early
23 2000s, we were transitioning to what was
24 called lower power DDR, low power DRAM.

25 So I was involved extensively with

1 J. Baker - Confidential

2 the design of circuitry in LPDDR, which is
3 used nowadays basically in every single cell
4 phone, tablet, or computer that's made.

5 Q. Did you ever design a cell phone?

6 A. I worked on the design of
7 components used in the cell phone, but I
8 don't think it's reasonable to say one person
9 designed the cell phone 'cause it's different
10 components from different places with
11 different engineers working on it. But like
12 I said, I had extensive work in how to lower
13 power in LPDDR which is used in cell phones
14 and tablets and computers.

15 Q. At any of the companies you worked
16 at, were they developing cell phones while
17 you were there?

18 A. They -- Micron developed memory for
19 use in the cell phone, but there's no one
20 company that would design or make a cell
21 phone without buying components for the cell
22 phone from other companies. It's not an
23 in-house thing you can do.

24 Q. So in your Declaration, turning to
25 paragraph 16. Let me know when you have

1 J. Baker - Confidential

2 that.

3 A. I'm there.

4 Q. And here this lists some of the
5 books you've authored, right?

6 A. Yes.

7 Q. And do any of these relate to power
8 management in a mobile device?

9 A. Yes.

10 Q. Which one or ones?

11 A. Basically all of them.

12 Q. But none of these are used as prior
13 art for this IPR, are they?

14 A. No.

15 Q. And I believe you're a named
16 inventor on some patents as well; is that
17 right?

18 A. Yes.

19 Q. And are any of those patents being
20 used as prior art in this IPR?

21 A. No.

22 Q. So for this IPR we can see the
23 grounds in paragraph 22, can you turn there
24 for me, page 10?

25 A. I am there.

1 J. Baker - Confidential

2 Q. And for this IPR, none of the
3 grounds rely on a single reference, do they?

4 A. I don't know if -- I mean, what's
5 listed there is what's the prior art used in
6 the grounds. But as my analysis shows I do
7 use Belt, for example, as a single reference
8 for obviousness. But overall I have
9 additional comments in my analysis that
10 say -- well, Foster is used and Norris is
11 used. But I do have discussion how Belt, for
12 example, would alone teach an element as
13 understood or with the knowledge of a POSITA
14 I guess that's looking at Belt.

15 But to answer your question, none
16 of the grounds there show only one piece of
17 prior art.

18 Q. And then flipping ahead to
19 paragraph 29, this is part of the Legal
20 Standards section of your Declaration. Let
21 me know when you see that.

22 A. I'm at paragraph 29.

23 Q. Okay. And there you say:

24 I understand that when considering
25 the obviousness of a patent claim, one should

1 J. Baker - Confidential

2 consider whether a teaching, suggestion, or
3 motivation to combine the references exist so
4 as to avoid impermissibly applying hindsight
5 when combining or modifying the prior art.

6 Do you see that?

7 MR. KATSANTONIS: Objection.

8 Form.

9 BY MR. BRUNEEL:

10 Q. Sorry, Dr. Baker, did you give an
11 answer?

12 A. I see those words, yes.

13 Q. And here you say impermissibly
14 applying hindsight. Is there a circumstance
15 where it would be permissible to apply
16 hindsight?

17 MR. KATSANTONIS: Objection to
18 form.

19 A. Not that I can think of in doing an
20 invalidity analysis.

21 BY MR. BRUNEEL:

22 Q. So then starting on page 34 of your
23 Declaration, no, that's on page 22, excuse
24 me.

25 MR. KATSANTONIS: Apologies, are

1 J. Baker - Confidential

2 we referring to the PDF page or the
3 number at the bottom of the page?

4 MR. BRUNEEL: I've been doing the
5 number at the bottom of the page. But
6 since it's exhibit page 27, I should
7 do that instead. So I will refer
8 to -- so thank you, Chris.

9 BY MR. BRUNEEL:

10 Q. So, Dr. Baker, when I refer to page
11 numbers, I will refer to the exhibit page
12 down at the bottom right-hand corner.

13 So this is Exhibit 1003, page 27.

14 Do you see that?

15 A. I'm there.

16 Q. And here is -- it's an overview of
17 the prior art references, and the first prior
18 art reference identified is Belt.

19 Do you see that?

20 A. Yes.

21 Q. When did you first become aware of
22 the Belt reference?

23 A. When looking at prior art for this
24 IPR. If I came across Belt in the past, I
25 don't recall.

1 J. Baker - Confidential

2 Q. And did you conduct your own prior
3 art search?

4 A. I don't think so, but I don't
5 clearly recall.

6 Q. So the Belt reference was provided
7 to you by counsel for Samsung; is that true?

8 MR. KATSANTONIS: Objection.

9 Seth, I'm sure you're aware but we
10 do have an agreement between the
11 parties of work product and
12 discussions with engineers as not
13 being discoverable.

14 MR. BRUNEEL: You said with
15 engineers?

16 MR. KATSANTONIS: Apologies,
17 experts.

18 MR. BRUNEEL: Okay.

19 BY MR. BRUNEEL:

20 Q. So let's go -- let's dive into
21 Belt. Let's go to paragraph 75 of your
22 Declaration, which is on page 37 of
23 Exhibit 1003. Let me know when you're there.

24 A. I'm at paragraph 75 on page 37 of
25 Exhibit 1003.

1 J. Baker - Confidential

2 Q. So here, these are some of your
3 opinions of limitation 1[c] of the
4 '417 patent; is that right?

5 A. Yes.

6 Q. In relation to 1[c] in
7 paragraph 75, you discuss some of Belt's
8 options when the lid is closed. There's
9 three options.

10 One, place the system in the
11 suspend mode; two, turn off the backlight
12 without stopping the system from operating;
13 or three, produce an audible beep and turn
14 off the backlight without stopping system
15 operation.

16 Do you see those?

17 A. Yes.

18 Q. So in option one, placing the
19 system in the suspend mode, what happens to
20 the device in Belt when it enters suspend
21 mode?

22 A. Can you put a copy of Belt in the
23 chat?

24 Q. Of course. Okay, let me know when
25 you see that. Should be Exhibit 1004, the

1 J. Baker - Confidential

2 Belt reference.

3 (Exhibit 1004, Previously marked,
4 was introduced.)

5 A. I downloaded. And would you mind
6 repeating the question?

7 BY MR. BRUNEEL:

8 Q. Referring to option one where Belt
9 places the system in the suspend mode, what
10 happens to the device in Belt when it enters
11 suspend mode?

12 MR. KATSANTONIS: Objection.
13 Form.

14 A. As seen in the abstract in the
15 suspend state, power is reduced.

16 BY MR. BRUNEEL:

17 Q. How does it reduce power, or how is
18 power reduced?

19 A. Well, that's discussed in column 3,
20 roughly lines 5 through 14. I'll read it.

21 The processor 11 and some other
22 system components are of a type which use
23 more power when running at a higher clock
24 speed than when running at a lower clock
25 speed.

1 J. Baker - Confidential

2 So I'll pause there. So what that
3 means is that when -- to reduce power, you go
4 from a higher clock speed to a lower clock
5 speed.

6 And I'm going to continue reading:

7 Therefore, clocks can be set to a
8 higher speed when rapid processing is
9 required despite the fact that a larger
10 amount of power is drawn from the system
11 battery during a given time period, whereas
12 when processing speed is not critical a lower
13 clock speed can be used in order to reduce
14 the amount of power being drawn from the
15 battery.

16 Q. Were you finished?

17 A. Yes. I was reading column 3,
18 lines 5 through 14 with a commentary in the
19 middle, to answer your question.

20 Q. If we look at Figure 5. Well, let
21 me back up. How does the device in Belt get
22 into suspend mode?

23 A. If we look at Figure 5, one way
24 that it -- went one way the device goes into
25 suspend mode is seen in decision block 158,

1 J. Baker - Confidential

2 lid close suspend. It can go into suspend
3 mode there but doesn't necessarily have to.
4 It says lid close suspend. And there's
5 another way to enter suspend mode in
6 block 163 in Figure 5.

7 Q. And what happens when the device in
8 Belt enters suspend mode?

9 A. It can enter a low power state or
10 it can stop running. I think in one place
11 they talk about suspend meaning stopping the
12 clock. But in column 3, as I just read, a
13 person of ordinary skill in the art would
14 understand that reducing power can be done by
15 reducing the clock frequency.

16 Q. So stopping the clock, would that
17 still have a clock frequency?

18 A. If there is no clock, there is no
19 clock frequency.

20 Q. Meaning if the clock is stopped
21 there's no frequency, there's no clock
22 frequency?

23 A. Yes. If there's no clock, there's
24 no clock frequency.

25 Q. Okay. I think we covered how it

1 J. Baker - Confidential

2 gets into suspend mode, but in this example
3 what triggers low power -- excuse me. What
4 triggers suspend mode in Belt?

5 MR. KATSANTONIS: Objection.

6 Form.

7 A. I thought I already answered that.
8 I gave one example in Figure 5 as closing the
9 lid. If that particular lid is closed then
10 it's okay to enter the suspend mode like it's
11 not doing something, then it would. It's a
12 decision.

13 BY MR. BRUNEEL:

14 Q. So in the suspend mode, the device
15 in Belt, the lid is closed. Is Belt doing
16 any processing in suspend mode?

17 A. I think we already covered that as
18 well in column 3. The lines I read and the
19 answer I gave answers that, as it discusses
20 in the abstract suspend mode. And I'll quote
21 from the abstract. Reduced power suspend
22 mode, or "reduced power suspend state," to be
23 precise. And then I showed how Belt
24 discloses reducing the power.

25 Now, the power can be suspended so

1 J. Baker - Confidential

2 there's no clock and there's no power from
3 the processor dissipated. But also as taught
4 in column 3, you can simply reduce the clock
5 frequency and reduce the power.

6 Q. So some of the other options in
7 Belt, options 2 and 3, again it's turning off
8 the backlight without stopping the system
9 from operating, or producing an audible beep
10 and turning off the backlight without
11 stopping the system from operating. Is the
12 only difference between those two options the
13 audible beep?

14 A. Do you mind if we also have
15 exhibit -- or you upload Exhibit 1005?
16 I think that would support my previous
17 answers a little bit more teaching in suspend
18 mode to go to an idle mode before we leave
19 this topic.

20 But to answer your question, the
21 current question, the words there, the
22 difference is the audible beep, yes.

23 Q. In your reading of Belt, are there
24 any other functional or performance
25 differences between options 2 or 3?

1 J. Baker - Confidential

2 A. No. I mean, they're informed with
3 column 3 about how to keep the system
4 running, just to reduce the power you lower
5 the clock frequency.

6 Q. And in options 2 or 3, it also
7 turns off the backlight. Why would it turn
8 off the backlight?

9 A. To reduce power. Because the
10 viewer is not looking at the display if the
11 lid of the computer is closed.

12 Q. And which would be a bigger
13 reduction in power, turning off the backlight
14 to the display or decreasing the clock speed
15 lowering the clock frequency?

16 MR. KATSANTONIS: Objection.
17 Form.

18 A. I don't know. It depends what the
19 processor is doing and how bright the user
20 has the display turned up.

21 BY MR. BRUNEEL:

22 Q. And I didn't forget you asked about
23 Foster, Exhibit 1005. I've added that to the
24 chat.

25 (Exhibit 1005, Previously marked,

1 J. Baker - Confidential

2 was introduced.)

3 BY MR. BRUNEEL:

4 Q. Let me know when you have that up.

5 A. I have it.

6 Q. And I believe one of the places you
7 refer to Foster is in your Declaration on
8 page 40. Exhibit 1003, page 40, paragraph 82
9 is one example of where you reference Foster.
10 Let me know when you see that.

11 A. I see it.

12 Q. And there you refer to Foster's
13 idle mode. What's the difference between an
14 idle mode and a suspend mode?

15 A. As Foster discloses, the idle mode
16 is simpler than the suspend mode because you
17 don't have to shut everything off and put
18 everything away, so it's easier to resume and
19 get back running. When you're running in an
20 idle mode, in simple terms, the computer will
21 wake up quicker.

22 Q. Which would use more power, the
23 idle mode or the suspend mode?

24 MR. KATSANTONIS: Objection.

25 Form.

1 J. Baker - Confidential

2 A. Well again, if suspend in Belt
3 means shutting everything off, then something
4 that's off uses less power than something
5 that's on. However, a person of ordinary
6 skill in the art, a POSITA, would understand
7 that you might want to just simply reduce the
8 power with the ability to have the computer
9 get back going in a much shorter time frame
10 and burn a little bit of power.

11 That's why Foster, which has many
12 of the same inventors as Belt, if I remember
13 correctly, and shares a common priority
14 application, if I remember correctly, teaches
15 adding an idle mode because of the benefits
16 that it would have of getting back up to
17 speed quicker.

18 But to answer your question,
19 shutting something off will use less power
20 than if something is on, even if that thing
21 that's on is running at a very low frequency
22 as taught in Foster.

23 BY MR. BRUNEEL:

24 Q. And does Foster -- is the change to
25 idle mode in Foster based on the lid of the

1 J. Baker - Confidential

2 laptop closing?

3 A. I think it's reasonable to say that
4 it could. I think it's also reasonable to
5 say that you can put it in an idle mode
6 without closing the lid. But I mean, I
7 certainly think running in idle mode with the
8 lid closed is something a user could decide
9 to do so that when they opened the lid, the
10 computer boots up faster.

11 Q. In paragraph 82 you've cited to
12 Foster, Exhibit 1005, starting on column 79,
13 line 61 through column 80, line 1.

14 Do you see that?

15 A. Yes.

16 Q. And this discusses the bottom of --
17 starting on line 66 of column 79:

18 As an example, a 20 megahertz
19 processor can be slowed to 5 megahertz by
20 dividing the -- moving into column 80 --
21 clock signal by four?

22 Do you see that?

23 A. Yes.

24 Q. And then skipping a couple lines,
25 so towards the end of line 3:

1 J. Baker - Confidential

2 The video is changed to a low power
3 mode at 4208, where the video RAM and refresh
4 of the LCD screen is maintained and all other
5 video circuitry is turned off.

6 Do you see that?

7 A. Yes.

8 Q. So in this example, the refresh of
9 the LCD screen is maintained. Does that mean
10 that the LCD screen is on?

11 MR. KATSANTONIS: Objection.

12 Form.

13 A. I don't know. I mean, that's
14 outside of what I cited, I believe. I was
15 talking about in idle mode or showing in the
16 idle mode that the frequency is reduced
17 'cause that's -- that's planed.

18 BY MR. BRUNEEL:

19 Q. So looking at paragraph 88 of your
20 Declaration on page 42 of Exhibit 1003. Let
21 me know when you see that.

22 A. I'm at paragraph 88 on page 42 of
23 Exhibit 1003.

24 Q. And this is part of your opinion
25 related to limitation 1[d] of the

1 J. Baker - Confidential

2 '417 patent; is that right?

3 A. Yes. And I note the typo in the
4 third line where it says see limitation 1[d].
5 Should say see limitation 1[c].

6 Q. Thank you. And here referring to
7 Belt you refer to Belt's PMI handler routine.
8 Do you see that?

9 A. Yes.

10 Q. In general, what is a PMI handler
11 routine?

12 A. It's a routine that manages power
13 management interrupts.

14 Q. And here you say at the bottom of
15 page 42:

16 As part of this routine, and then
17 you quote Belt, "the processor changes the
18 register 32 in order to force the CPU to run
19 at its fastest clock speed, so that the PMI
20 routine will execute as fast as possible."

21 Do you see that?

22 A. Yes.

23 Q. Does Belt provide any examples of a
24 PMI that can occur when the laptop is closed,
25 when the lid is closed?

1 J. Baker - Confidential

2 A. I've already covered the reduction
3 in the clock frequency in column 3, so I
4 mean, I don't recall right off the top of my
5 head that it talks -- Belt talks about how it
6 would send different types of interrupts for
7 reducing the clock frequency. It may be
8 there, I just don't recall. If you'd like me
9 to look, I will.

10 Q. Would there be a PMI interrupt that
11 increases the clock speed?

12 A. Yes, we just discussed that.
13 That's in -- bottom of page -- discussed in
14 the bottom of page 42, top of page 43.

15 Q. Right. So the example we discussed
16 here, does that occur when the lid is opened
17 or when the lid is closed, in Belt?

18 A. I think it could occur in either
19 case depending on what the computer's doing.
20 If for some reason you have the lid closed
21 and it's at a lower frequency and waiting for
22 something or waiting to do something and then
23 you ask it to do something, the user could
24 have it increase the processor speed so that
25 what's being requested with the lid closed is

1 J. Baker - Confidential

2 done faster.

3 Q. So how could a user request that
4 the processor do something with the lid
5 closed?

6 A. Could be a network connection,
7 could be external button on the side like a
8 power button.

9 Q. Are those described in Belt?

10 A. I believe so. Give me a second.
11 I mean, for example, in the background, at
12 roughly line 50 to 57, Belt talks about prior
13 systems that used a push button to enter and
14 exit from suspend mode. And I think if the
15 computer's closed that push button, I mean, a
16 POSITA would understand it could be external,
17 it could be a power button.

18 Q. So looking at Figure 8 of Belt, can
19 you turn to that one, please?

20 A. I'm there.

21 Q. And this is part of that PMI
22 interrupt routine; is that right?

23 MR. KATSANTONIS: Objection.

24 Form.

25 A. I think this particular flowchart

1 J. Baker - Confidential

2 is related to the resume handler code.

3 BY MR. BRUNEEL:

4 Q. So then looking at 183 in the
5 figure there, it evaluates whether the lid is
6 open or closed, doesn't it?

7 A. Decision block 183 decides if the
8 lid is closed, yes.

9 Q. And what does it do if the lid is
10 closed?

11 A. It does what's indicated in 184.
12 I can read it into the record if that's
13 useful.

14 Q. Does anything in 184 describe
15 changing the clock frequency?

16 A. Yes.

17 Q. What in block 184 does?

18 A. For example, start slow refresh
19 rate.

20 Q. That's the rate of the clock, is
21 that what you're saying?

22 A. That's the rate of a clock for a
23 particular application, yes, to do refresh.

24 Q. So for element 1[c], so flip back
25 to paragraph 76, which is on page 37 of

1 J. Baker - Confidential

2 Exhibit 1003. Let me know when you have
3 that.

4 A. I'm there.

5 Q. And the last full sentence in that
6 paragraph says that a POSITA would have --

7 Accordingly, a POSITA would have
8 further understood that when the lid to
9 Belt's laptop computer system is closed,
10 higher processing speeds are not critical
11 because the system would not be in active
12 use?

13 Do you see that?

14 A. Yes.

15 Q. Now, in element 1[d] on page 43 of
16 Exhibit 1003 in paragraph 88 referring to
17 Belt, the first sentence on page 43:

18 The processor changes register the
19 register 32 in order to force the CPU to run
20 at its fastest clock speed.

21 Do you see that?

22 A. Yes.

23 Q. So in 1[c] it seems that processing
24 speeds are not critical and now in 1[d] the
25 CPU runs at its fastest clock speed.

1 J. Baker - Confidential

2 How can both be true?

3 A. If you look at the end of the
4 quotation in the fourth and beginning of the
5 fifth line on page 43, I'll read it. I'll
6 read the whole quotation:

7 The clock controller controls the
8 frequency of the clock signal so as to become
9 a frequency higher than the second frequency
10 when a specific processing is executed.

11 So if you've closed the lid in Belt
12 and you shut off the display, you shut off
13 the clock frequency to reduce the powers Belt
14 teaches. Now, if you have a specific
15 processing that is requested, you will run
16 the PMI routine to increase the clock
17 frequency.

18 Q. And that quotation is from Belt?

19 A. (Document review.)

20 Sorry, that quotation, the previous
21 one where the PMI routine is executed is the
22 quotation and I was actually quoting claim
23 language, but that corresponding claim
24 language is in the bottom of -- top by Belt,
25 is in the bottom of column 7, 67 through 82.

1 J. Baker - Confidential

2 So I made a mistake.

3 Q. So then in the example you gave the
4 scenario where you close the lid, and you've
5 shut off the display, and you shut off the
6 clock frequency, and then a specific
7 processing is requested, what examples of
8 specific processing does Belt provide?

9 MR. KATSANTONIS: Objection.

10 Form.

11 A. Yeah, that question
12 mischaracterized my answer. I didn't testify
13 that I shut off -- in my example I didn't
14 testify that I shut off the clock frequency.
15 I testified that the clock frequency was
16 reduced as we discussed in 1[c].

17 BY MR. BRUNEEL:

18 Q. All right. So then in a scenario
19 where you close the lid, you've shut off the
20 display, the clock frequency is reduced and
21 then a specific processing is requested.
22 What examples of those specific processing
23 does Belt provide?

24 A. If I understand the question
25 correctly, you're asking me for an example

1 J. Baker - Confidential

2 from Belt where if you ran a video game, for
3 example on the laptop the power management
4 interrupt might increase the frequency as
5 compared to using a text editor where you
6 don't need to run as fast a frequency.

7 Is that what you're asking for an
8 example of?

9 Q. I'm asking for an example of
10 specific processing while the laptop is
11 closed and in a suspend mode.

12 A. So my understanding is you are
13 looking for a specific example of things that
14 would require higher processing speed like a
15 video game versus using a text editor, and I
16 don't recall Belt giving those examples.

17 However, a POSITA would certainly
18 understand that certain applications require
19 more processing power than other
20 applications.

21 And when we get to a good breaking
22 point, can we take a break?

23 Q. About 10 or 15 minutes total
24 remaining, so we can take a break and come
25 back for that or power through. Let's leave

1 J. Baker - Confidential

2 it up to you.

3 A. Let's power through, if you're
4 telling the truth.

5 Q. That's what I got left.

6 A. Okay. I mean, I've got experiences
7 that taint that comment.

8 Q. So the question was narrower than
9 that. It was, we have Belt's laptop, the lid
10 is closed, and it's in a suspend state, and
11 does Belt provide examples of something that
12 would increase the -- well, are you with me
13 so far in the example, just setting it up?

14 A. Yes.

15 Q. And in the suspend state the clock
16 is at, or we should use the idle state from
17 Foster. Sorry.

18 So we have a laptop that -- we have
19 a laptop that's closed, it's in the idle
20 state where the clock frequency has been
21 reduced to save power. Are you with me so
22 far?

23 A. Yes.

24 Q. And now some sort of request is
25 made to do processing that would cause the

1 J. Baker - Confidential

2 clock frequency to increase. I'm looking for
3 an example of what that request would be.

4 MR. KATSANTONIS: Objection.
5 Form.

6 A. Just to be -- so I'm clear, you're
7 looking for an example of we've closed the
8 lid, the frequency of the CPU is dropped, now
9 you're looking for an example of where the
10 lid is closed and the CPU frequency is
11 increased?

12 BY MR. BRUNEEL:

13 Q. That's right.

14 A. I think, for example, when you look
15 at Figure 8, which is the resume handler in
16 Belt, when your computer gets a resume, it's
17 going to check if the lid is closed, and if
18 it's yes, then it's going to provide or
19 instruct the system control processor, the
20 processor to do certain things.

21 I think that's one example where
22 the frequency might be desirable to increase
23 the speed. Simply because if you're running,
24 for example, at 5 hertz and you're trying to
25 do something where you're loading the memory

1 J. Baker - Confidential

2 and you're going to keep the memory loaded
3 and refreshed so that when you open the lid,
4 the computer can be used quickly.

5 You can't -- a person of ordinary
6 skill in the art would understand that
7 5 hertz isn't going to be a fast enough
8 frequency for you to load the memory and
9 instruct the memory to do certain things. So
10 they would understand you'd have to go above
11 5 hertz. So I think that's one example.

12 But I think generally speaking a
13 person of ordinary skill in the art would
14 understand that there will be situations
15 where you want the laptop to do things while
16 it's closed when it's just -- so, for
17 example, it can wake up faster.

18 I mean, one other example Belt with
19 the reference we haven't talked about is
20 Alberth, where you receive a phone call. And
21 in that situation you'd also want the
22 computer to wake up and be able to respond to
23 the call, either with the caller ID, as I
24 mentioned in the report, or allowing you to
25 perhaps maybe talk without opening the lid.

1 J. Baker - Confidential

2 Q. So along those lines, looking at
3 page 47 of your Declaration, Exhibit 1003,
4 I direct you to paragraph 99. Let me know
5 when you have that in front of you.

6 A. I'm there.

7 Q. So there you say that Belt and
8 Foster each disclose that their respective
9 laptop computer systems can be connected to
10 an external keyboard, mouse, and display.

11 Do you see that?

12 A. Yes.

13 Q. So in a scenario where the lid of
14 Belt is closed but the system continues
15 operating with these external keyboard,
16 mouse, and display, would the user still
17 need -- would Belt still -- will Belt lower
18 the frequency of the clock speed?

19 A. You close the lid of Belt, clock's
20 frequency is lowered, so it can detect when
21 something is plugged into it. You plug in
22 your keyboard, you plug in your mouse, you
23 plug in your external display, Belt says, oh,
24 they're gonna use the keyboard -- or they're
25 going to use the laptop but not use the

1 J. Baker - Confidential

2 keyboard and display of the laptop, let's
3 increase the frequency.

4 So that would be another example of
5 increasing the frequency after the frequency
6 has been decreased when the lid was closed.

7 Q. And in the -- if the external
8 keyboard, mouse, displayer connected before
9 the laptop is closed and not necessary when
10 the laptop is closed, would the clock --
11 would the frequency of the clock stay the
12 same?

13 A. It's a design choice. I mean, it
14 would be what the user or the computer
15 architect designed it to be. I think it's --
16 it's just what a person of ordinary skill in
17 the art would understand that you could make
18 different choices to do things.

19 MR. BRUNEEL: All right. I think
20 I did 10 minutes. I will pass the
21 witness.

22 MR. KATSANTONIS: Can we take a
23 five-minute break please?

24 MR. BRUNEEL: Sure.

25 THE COURT REPORTER: We're off the

1 J. Baker - Confidential

2 record.

3 (Off the record from 1:11 p.m. to
4 1:17 p.m.)

5 THE COURT REPORTER: We're back on
6 the record.

7 EXAMINATION BY

8 MR. KATSANTONIS:

9 Q. Dr. Baker, do you recall earlier
10 this morning when you were asked questions
11 about specific jobs relating to power
12 management?

13 A. I don't recall being asked that
14 specific question. I recall being asked
15 questions related to a specific time frame
16 that I worked, for example, Micron.

17 Q. Can you explain what your work
18 experience with power management is?

19 A. I mean, I'll give a few examples,
20 but power is a big concern in electronics,
21 especially battery powered electronics.
22 I worked on circuitry for reducing power in
23 DRAM, for example.

24 I led the development of the
25 delay-locked loop for Micron's transition to

1 J. Baker - Confidential

2 DDR DRAM from regular synchronous DRAM. And
3 as part of that I designed the lower power
4 DLL that would be put in a suspend mode or, I
5 believe at the time in the late '90s, the DDR
6 one spec required that it wake up from being
7 suspended in 200 clock cycles.

8 Other examples, I worked on charge
9 pumps that have a clock enable circuit to
10 shut them off when they're not in use to
11 reduce power. Designed all kinds of
12 switching and linear power supplies for
13 supplying power to electronics that have
14 features where you can shut them down or --
15 I mean -- but very important was their
16 efficiency, which means they're low power.

17 Obviously, the RFID tags I talked
18 about are battery powered. It's low powered.
19 I mean, probably one of the things I first
20 designed in 1986 was a handheld battery
21 operated pulse generator that technicians
22 could use to check the compensation of
23 scopes. So those are some examples.

24 MR. KATSANTONIS: All right.

25 I have no further questions.

1 J. Baker - Confidential

2 Thank you.

3 MR. BRUNEEL: One request. It
4 looks like in his Declaration it says
5 his CV is attached as Appendix B.
6 Either I just couldn't find it or it
7 wasn't included as the same document.
8 So I would just ask counsel, Chris, if
9 you guys can check that it was
10 submitted to the PTO, and if not,
11 please provide it.

12 MR. KATSANTONIS: Of course.

13 THE COURT REPORTER: We're off the
14 record.

15 (Concluded at 1:21 p.m. Eastern Time)

16

17

18

19

20

21

22

23

24

25

1 J. Baker - Confidential

2

3 J U R A T

4

5

6 I, R. JACOB BAKER, do hereby
7 certify under penalty of perjury that
8 I have read the foregoing transcript
9 of my deposition taken on the 17th of
10 April, 2026; that I have made such
11 corrections as appear noted herein in
12 ink, initialed by me; that my
13 testimony as contained herein, as
14 corrected, is true and correct.

15

16

17 _____
R. JACOB BAKER

18

19

Subscribed and sworn to before me

20

This _____ day of _____, 20__.

21

22

NOTARY PUBLIC

23

24

25

1 J. Baker - Confidential

2 -----I N D E X-----

3 WITNESS: JACOB BAKER

4 EXAMINATION BY: PAGE

5 MR. BRUNEEL 4

6 MR. KATSANTONIS 44

7

8

-----E X H I B I T S-----

9

10 NUMBER DESCRIPTION PAGE

11

Exhibit 1003 Previously marked 6

12

Exhibit 1004 Previously marked 21

13

Exhibit 1005 Previously marked 26

14

15

16

17

18

19

20

21

22

23

24

25

1 J. Baker - Confidential

2 C E R T I F I C A T E

3

4 STATE OF NEW YORK)
5 : SS.:
6 COUNTY OF RICHMOND)

7

8 I, Candida Borriello, a Stenographic
9 Court Reporter and Notary Public for and
10 within the State of New York, do hereby
11 certify:

12 That the witness, R. JACOB BAKER,
13 whose examination is hereinbefore set forth
14 was duly sworn and that such examination is a
15 true record of the testimony given by that
16 witness.

17 I further certify that I am not
18 related to any of the parties to this action
19 by blood or by marriage and that I am in no
20 way interested in the outcome of this matter.

21 IN WITNESS WHEREOF, I have hereunto
22 set my hand this 17th day of April, 2026.

23

24

25

Candida Borriello

CANDIDA BORRIELLO

1 J. Baker - Confidential

2 ERRATA SHEET FOR THE TRANSCRIPT OF:

3 Case Name: Samsung v. Maxell

4 Dep. Date: April 17, 2026

4 Deponent: R. Jacob Baker

5	Pg.	Ln.	Now Reads	Should Read	Reason
---	-----	-----	-----------	-------------	--------

6	_____	_____	_____	_____	_____
---	-------	-------	-------	-------	-------

7	_____	_____	_____	_____	_____
---	-------	-------	-------	-------	-------

8	_____	_____	_____	_____	_____
---	-------	-------	-------	-------	-------

9	_____	_____	_____	_____	_____
---	-------	-------	-------	-------	-------

10	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

11	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

12	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

13	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

14	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

15	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

16	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

17	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

18	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

19	_____	_____	_____	_____	_____
----	-------	-------	-------	-------	-------

20 _____
R. JACOB BAKER

21 SUBSCRIBED AND SWORN BEFORE ME,

22 This____ day of_____, 20____.

23 _____
24 Notary Public

25 My Commission Expires:_____

1	20:3, 6 31:5 34:24 35:23 37:16	4	7
1 29:13 10 15:24 38:23 43:20 1003 6:8, 13 18:13 19:23, 25 27:8 30:20, 23 35:2, 16 42:3 1004 20:25 21:3 1005 25:15 26:23, 25 29:12 11 21:21 123rd 5:5 14 21:20 22:18 15 38:23 158 22:25 16 14:25 163 23:6 183 34:4, 7 184 34:11, 14, 17 1985 8:8, 14 1999 12:13 1:11 44:3 1:17 44:4 1[c	1[d 30:25 31:4 35:15, 24 2 25:7, 25 26:6 20 29:18 2000s 13:22, 23 2002 12:12 2025 6:25 7:7 20th 5:8 22 15:23 17:23 27 18:6, 13 28 6:25 29 16:19, 22 3 3 12:12 21:19 22:17 23:12 24:18 25:4, 7, 25 26:3, 6 29:25 32:3 32 31:18 35:19 34 17:22 37 19:22, 24 34:25	40 27:8 417 5:18, 20, 21 20:4 31:2 42 30:20, 22 31:15 32:14 4208 30:3 43 32:14 35:15, 17 36:5 47 42:3 5 21:20 22:18, 20, 23 23:6 24:8 29:19 40:24 41:7, 11 50 33:12 57 33:12 6 7:19 61 29:13 66 6:19 29:17 67 36:25	7 36:25 7, 577, 417 5:16 75 19:21, 24 20:7 76 34:25 79 29:12, 17 8 8 33:18 40:15 80 29:13, 20 82 27:8 29:11 36:25 85 9:17 88 30:19, 22 35:16 9 90s 13:22 94 10:18, 25 95 10:25 99 42:4 A ability 28:8

able 5:13 11:10 41:22	antenna 11:9, 14	B	20:13 25:9, 13, 22
above 41:10	anyone 4:19 7:13, 16	B-A-K-E-R	beginning 36:4
abstract 21:14 24:20, 21	Apologies 17:25 19:16	4:15	behalf 7:11
across 18:24	application 28:14 34:23	back 22:21 27:19 28:9, 16 34:24 38:25 44:5	believe 15:15 27:6 30:14 33:10
active 35:11	applications 38:18, 20	background 8:7 33:11	Belt 16:7, 11, 14 18:18, 22, 24 19:6, 21 20:20, 22 21:2, 8, 10 22:21 23:8 24:4, 15, 23 25:7, 23 28:2, 12 31:7, 17, 23 32:5, 17 33:9, 12, 18 35:17 36:11, 13, 18, 24 37:8, 23 38:2, 16 39:11 40:16 41:18 42:7, 14, 17, 19, 23
added 26:23	apply 17:15	backlight 20:11, 14 25:8, 10 26:7, 8, 13	Belt's 20:7 31:7 35:9 39:9
adding 28:15	applying 17:4, 14	Baker 4:1, 11, 15, 25 5:1 6:1, 11 7:1 8:1 9:1 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1, 10 18:1, 10 19:1 20:1 21:1 22:1 23:1 24:1 25:1 26:1 27:1 28:1 29:1 30:1 31:1 32:1 33:1 34:1 35:1 36:1 37:1 38:1 39:1 40:1 41:1 42:1 43:1 44:1, 9	benefits 28:15
additional 16:9	architect 43:15		best 13:13
agreement 19:10	around 5:8 12:12		big 44:20
ahead 16:18	art 15:13, 20 16:5, 17 17:5 18:17, 18, 23 19:3 23:13 28:6 41:6, 13 43:17		bigger 26:12
Alan 6:3			bit 10:10 25:17 28:10
Alberth 41:20			block 22:25 23:6 34:7, 17
allow 9:7	asked 7:8 26:22 44:10, 13, 14		
allowed 9:12	asking 37:25 38:7, 9		
allowing 41:24	assistant 10:14		
Amkor 12:21	attorney 7:17		
amount 22:10, 14	audible 20:13 25:9, 13, 22		
analysis 16:6, 9 17:20	August 6:25		
answer 16:15 17:11 22:19 24:19 25:20 28:18 37:12	authored 15:5		
answered 24:7	avoid 17:4		
answers 24:19 25:17	aware 18:21 19:9		
		beep	

Boise 12:14		Chris 6:2 18:8	32:17, 20, 25
book 13:9	c	circuit 11:18	33:5, 15
books 13:10, 12 15:5	call 5:21 41:20, 23	circuitry 14:2 30:5 44:22	34:6, 8, 10 35:9 36:11 38:11 39:10, 19 40:7, 10, 17 41:16 42:14 43:6, 9, 10
boots 29:10	called 4:5 12:20 13:24	circumstance 17:14	closing 24:8 29:2, 6
bottom 18:3, 5, 12 29:16 31:14 32:13, 14 36:24, 25	caller 41:23	cited 29:11 30:14	CMOS 11:12, 15
bought 13:2, 10, 11	case 4:13 8:2 32:19	claim 16:25 36:22, 23	code 34:2
break 38:22, 24 43:23	cell 13:18 14:3, 5, 7, 9, 13, 16, 19, 20, 21	clear 40:6	colleague 6:3
breaking 38:21	certain 38:18 40:20 41:9	clearly 7:6 12:16 19:5	colloquially 8:21
bright 26:19	certainly 29:7 38:17	clock 21:23, 24 22:4, 13 23:12, 15, 16, 17, 18, 19, 20, 21, 23, 24 25:2, 4 26:5, 14, 15 29:21 31:19 32:3, 7, 11 34:15, 20, 22 35:20, 25 36:7, 8, 13, 16 37:6, 14, 15, 20 39:15, 20 40:2 42:18 43:10, 11	column 21:19 22:17 23:12 24:18 25:4 26:3 29:12, 13, 17, 20 32:3 36:25
bring 4:22	change 28:24	clock's 42:19	combine 17:3
Bruneel 4:10, 12 6:10 12:9 17:9, 21 18:4, 9 19:14, 18, 19 21:7, 16 24:13 26:21 27:3 28:23 30:18 34:3 37:17 40:12 43:19, 24	changed 8:4 30:2	clocks 22:7	combining 17:5
burn 28:10	changes 31:17 35:18	close 23:2, 4 37:4, 19 42:19	come 38:24
button 33:7, 8, 13, 15, 17	changing 34:15	closed 20:8 24:9, 15 26:11 29:8 31:24, 25	comment 39:7
buy 13:12	chat 6:7 20:23 26:24		commentary 22:18
buying 14:21	check 40:17		comments 16:9
	Chicago 5:8		common 28:13
	chip 11:8, 18		companies 14:15, 22
	chips 13:6		company 8:13 9:16 12:20, 21 14:20
	choice 43:13		
	choices 43:18		

compared 38:5 Complementary 11:16 components 11:4, 23 12:2, 7 14:7, 10, 21 21:22 computer 8:25 9:2, 4, 6 14:4 26:11 27:20 28:8 29:10 35:9 40:16 41:4, 22 42:9 43:14 computer's 32:19 33:15 computers 14:14 concern 44:20 conduct 19:2 Confidential 4:1 5:1 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1 18:1 19:1 20:1 21:1 22:1 23:1 24:1 25:1 26:1 27:1 28:1 29:1 30:1 31:1 32:1 33:1 34:1 35:1 36:1 37:1 38:1 39:1 40:1 41:1 42:1 43:1 44:1 connected 42:9 43:8	connection 33:6 connections 10:17 consider 17:2 considered 10:5 considering 16:24 consulting 13:7, 14, 15 consumer 10:5, 21, 23 11:5 consumers 10:3 contacted 13:13 continue 22:6 continues 42:14 control 40:19 controller 36:7 controls 36:7 copy 20:22 corner 18:12 correctly 28:13, 14 37:25 corresponding 36:23 counsel 19:7 couple 29:24 course 20:24 COURT 4:2 43:25	44:5 covered 23:25 24:17 32:2 CPU 31:18 35:19, 25 40:8, 10 critical 22:12 35:10, 24 current 25:21 customers 13:5 D D-R-A-M 11:3 Data 13:21 database 9:2 date 12:11 dated 6:25 DDR 13:24 decide 29:8 decides 34:7 decision 22:25 24:12 34:7 Declaration 6:12 7:5, 9, 12, 25 14:24 16:20 17:23 19:22 27:7 30:20 42:3 decreased 43:6 decreasing 26:14	defense 8:20 delay- locked 44:25 depending 32:19 depends 26:18 deposed 4:25 deposition 5:7 describe 34:14 described 33:9 design 10:2, 19 11:7, 12, 14 14:2, 5, 6, 20 43:13 designed 9:24 11:7 14:9 43:15 designs 10:4 desirable 40:22 desktop 11:25 detect 42:20 developed 14:18 developing 14:16 development 13:20 44:24 device 15:8 20:20 21:10 22:21, 24 23:7 24:14 devices 11:5, 19 12:2, 8
---	---	---	---

diagnostic 9:25 10:11 difference 25:12, 22 27:13 differences 25:25 different 14:9, 10, 11 32:6 43:18 direct 42:4 disclose 42:8 discloses 24:24 27:15 discoverable 19:13 discuss 20:7 discussed 21:19 32:12, 13, 15 37:16 discusses 24:19 29:16 discussion 16:11 discussions 19:12 display 12:3 26:10, 14, 20 36:12 37:5, 20 42:10, 16, 23 43:2 displayer 43:8 displays 11:2 dissipated 25:3 dive 19:20 dividing 29:20 DLA 6:3 7:10, 14	document 6:16 36:19 doing 12:18 17:19 18:4 24:11, 15 26:19 32:19 Double 13:21 downloaded 21:5 drafting 8:25 DRAM 11:2, 24 13:21, 24 44:23 drawn 22:10, 14 drop 6:7 dropped 40:8 duly 4:6	9:14 electronics 44:20, 21 element 16:12 34:24 35:15 end 29:25 36:3 Energy 8:10 9:19, 22 engaged 7:10 engineer 8:8 9:18 10:19, 20 engineering 8:13, 14, 16 9:16 12:14 engineers 12:25 14:11 19:12, 15 enter 5:25 23:5, 9 24:10 33:13 entering 9:13 enters 20:20 21:10 23:8 equipment 8:23 era 8:18 establish 10:17 evaluates 34:5 EXAMINATION 4:9 44:7 examined 4:7 examples 31:23 37:7, 22 38:16 39:11 44:19 excuse 17:23 24:3	execute 31:20 executed 36:10, 21 exhibit 6:7, 8, 13 18:6, 11, 13 19:23, 25 20:25 21:3 25:15 26:23, 25 27:8 29:12 30:20, 23 35:2, 16 42:3 exist 17:3 exit 33:14 experience 44:18 experiences 39:6 experts 19:17 explain 44:17 extensive 14:12 extensively 13:25 extent 12:4 external 33:7, 16 42:10, 15, 23 43:7
	E		F
	earlier 44:9 early 13:22 easier 27:18 easy 5:21 editor 38:5, 15 EG&G 8:10 9:19, 22 either 32:18 41:23 electrical 8:12, 22 9:15 electronically		fabricate 13:6 fabrication 11:18 12:23 13:2 facilities 13:3

facility 10:12 12:24	forget 26:22	functional 25:24	H
fact 22:9	form 11:22 17:8, 18 21:13	G	handler 31:7,10 34:2 40:15
faculty 10:20	24:6 26:17	game 38:2,15	hardware 13:18
fall 9:17	27:25 30:12	gave 24:8,19 37:3	head 32:5
familiar 10:3	33:24 37:10 40:5	general 31:10	helmet 12:3
far 39:13,22	forth 7:25	generally 11:6 41:12	hertz 40:24 41:7, 11
fast 31:20 38:6 41:7	Foster 16:10 26:23 27:7,9,15 28:11,22,24, 25 29:12 39:17 42:8	getting 28:16	higher 21:23 22:4,8 35:10 36:9 38:14
faster 29:10 33:2 41:17	Foster's 27:12	gigs 13:15	hindsight 17:4,14,16
fastest 31:19 35:20, 25	foundries 13:5	give 17:10 33:10 44:19	hired 12:24
fifth 36:5	four 29:21	given 22:11	hold 7:24
figure 22:20,23 23:6 24:8 33:18 34:5 40:15	fourth 36:4	giving 38:16	home 4:18
finished 22:16	frame 13:8 28:9 44:15	goes 22:24	I
first 10:21 13:9 18:17,21 35:17	frequency 23:15,17,19, 21,22,24 25:5 26:5,15 28:21 30:16 32:3,7,21 34:15 36:8, 9,13,17 37:6,14,15, 20 38:4,6 39:20 40:2, 8,10,22 41:8 42:18,20 43:3,5,11	going 6:6 22:6 28:9 40:17, 18 41:2,7 42:25	ID 41:23
five-minute 43:23	front 7:21 42:5	good 4:11 38:21	Idaho 10:15,16
flip 34:24	full 4:13 35:5	GPU 12:18	identified 18:18
flipping 16:18		GPUS 12:18	idle 25:18 27:13, 14,15,20,23 28:15,25 29:5,7 30:15,16 39:16,19
flowchart 33:25		grounds 15:23 16:3, 6,16	ignition 10:12
follows 4:8		guess 7:7 13:12 16:14	impermissibly
force 31:18 35:19			

17:4,13 impulse 10:10 in-house 14:23 increase 32:24 36:16 38:4 39:12 40:2,22 43:3 increased 40:11 increases 32:11 increasing 43:5 indicated 34:11 information 9:6,7 informed 26:2 initiative 8:20 instruct 40:19 41:9 instrumentati on 10:11 instruments 9:24 integrated 11:18 intern 8:14,16 interrupt 32:10 33:22 38:4 interruptions 31:13 32:6 introduced 6:9 21:4 27:2 invalidity 17:20 inventor 15:16	inventors 28:12 inventory 11:10 involved 12:22 13:25 IPR 5:16 15:13, 20,22 16:2 18:24 Israel 12:17 J J-A-C-O-B 4:15 Jacob 4:14 jobs 44:11 July 7:7 K Katsantonis 5:24 6:2 11:21 17:7, 17,25 19:8, 16 21:12 24:5 26:16 27:24 30:11 33:23 37:9 40:4 43:22 44:8 keep 26:3 41:2 keyboard 42:10,15,22, 24 43:2,8 kind 11:4 know 6:11,19 7:20 12:4 14:25 16:4,21	19:23 20:24 26:18 27:4, 10 30:13,21 35:2 42:4 knowledge 9:11 16:13 known 8:21 Korea 13:4 L Lab 10:10 language 36:23,24 laptop 29:2 31:24 35:9 38:3,10 39:9,18,19 41:15 42:9, 25 43:2,9,10 larger 22:9 Las 4:18 9:20 late 13:22 Lawrence 10:9 LCD 30:4,9,10 leave 25:18 38:25 led 13:20 44:24 left 39:5 Legal 16:19 lid 20:8 23:2,4 24:9,15 26:11 28:25 29:6,8,9 31:25 32:16,	17,20,25 33:4 34:5,8, 9 35:8 36:11 37:4,19 39:9 40:8,10,17 41:3,25 42:13,19 43:6 Limbach 6:3 limitation 20:3 30:25 31:4,5 line 29:13,17,25 31:4 33:12 36:5 lines 21:20 22:18 24:18 29:24 42:2 listed 16:5 lists 15:4 little 11:8 25:17 28:10 Livermore 10:9,13 load 41:8 loaded 41:2 loading 40:25 look 22:20,23 32:9 36:3 40:14 looking 7:20 16:14 18:23 26:10 30:19 33:18 34:4 38:13 40:2,7,9 42:2
--	--	---	---

loop 44:25 lot 8:19 13:7, 13 low 13:24 23:9 24:3 28:21 30:2 lower 13:24 14:12 21:24 22:4, 12 26:4 32:21 42:17 lowered 42:20 lowering 26:15 LPDDR 14:2, 13	13:10 16:4 26:2 29:6 30:9, 13 32:4 33:11, 15 39:6 41:18 43:13 44:19 meaning 23:11, 20 means 22:3 28:3 Measurements 8:11 9:19, 23 megahertz 29:18, 19 memory 5:9 9:5 11:3 13:2, 19 14:18 40:25 41:2, 8, 9 mentioned 41:24 metal-oxide-semiconductor 11:17 Micron 10:8, 17, 19 11:20 12:19 13:21 14:18 44:16 Micron's 44:25 middle 22:19 mind 21:5 25:14 mining 8:23 minutes 38:23 43:20 mischaracterized 37:12 mistake 37:2 mobile 11:19 12:2, 5, 7 15:8	mode 20:11, 19, 21 21:9, 11 22:22, 25 23:3, 5, 8 24:2, 4, 10, 14, 16, 20, 22 25:18 27:13, 14, 15, 16, 20, 23 28:15, 25 29:5, 7 30:3, 15, 16 33:14 38:11 modifying 17:5 money 8:19 month 5:10 morning 4:11 44:10 motivation 17:3 mouse 42:10, 16, 22 43:8 moving 12:6 29:20	network 33:6 Nevada 4:18 9:20 Norris 16:10 Notary 4:6 note 31:3 notes 4:22 nowadays 14:3 nuclear 9:24 10:6 number 5:16 18:3, 5 numbers 18:11
M			0
made 12:18 14:4 37:2 39:25 maintained 9:8 30:4, 9 make 5:21 14:20 43:17 management 15:8 31:13 38:3 44:12, 18 manages 31:12 March 5:8 marked 6:8 21:3 26:25 materials 4:23 Maxell 4:12 mean 9:4 12:5			Objection 11:21 17:7, 17 19:8 21:12 24:5 26:16 27:24 30:11 33:23 37:9 40:4 obviousness 16:8, 25 occur 31:24 32:16, 18 okay 6:15 8:15 16:23 19:18 20:24 23:25 24:10 39:6 one 13:11 14:8, 19 15:10 16:16, 25 20:10, 18 21:8 22:23, 24 23:10
		N	
		name 4:11, 13 named 15:15 narrower 39:8 national 10:10, 12 13:3 necessarily 23:3 necessary 43:9 need 38:6 42:17	

24:8 27:6,9 33:19 36:21 40:21 41:11, 18 ones 12:2 15:10 open 6:12 34:6 41:3 opened 29:9 32:16 opening 41:25 operating 20:12 25:9, 11 42:15 operation 20:15 opinion 30:24 opinions 7:24 8:4 20:3 option 20:18 21:8 options 20:8,9 25:6, 7,12,25 26:6 order 22:13 31:18 35:19 ordinary 23:13 28:5 41:5,13 43:16 organizing 9:5 outside 30:14 overview 18:16 P p.m. 44:3,4	package 11:12 12:6 packaging 12:21 page 6:19,23 7:19 15:24 17:22, 23 18:2,3,5, 6,10,11,13 19:22,24 27:8 30:20, 22 31:15 32:13,14 34:25 35:15, 17 36:5 42:3 paper 9:11 paragraph 7:20 14:25 15:23 16:19, 22 19:21,24 20:7 27:8 29:11 30:19, 22 34:25 35:6,16 42:4 part 16:19 30:24 31:16 33:21 particular 24:9 33:25 34:23 parties 19:11 pass 43:20 past 18:24 patent 5:16,18,20, 21 12:11 16:25 20:4 31:2 patents 15:16,19 pause 22:2	PDF 6:19 7:19 18:2 pencil 9:10 people 13:9,10,12 performance 25:24 period 22:11 permissible 17:15 person 14:8 23:13 28:5 41:5,13 43:16 petitioners 6:4 phone 13:18 14:4, 5,7,9,19,21, 22 41:20 phones 14:13,16 piece 16:16 pilot 12:3 Piper 6:3 7:10 place 20:10 23:10 places 14:10 21:9 27:6 placing 20:18 planed 30:17 please 4:13 33:19 43:23 plug 42:21,22,23 plugged 42:21	PMI 31:7,10,19, 24 32:10 33:21 36:16, 21 point 9:9 11:9 38:22 portion 11:13 POSITA 16:13 28:6 33:16 35:6,7 38:17 position 9:18 10:14 possible 31:20 power 13:24 14:13 15:7 21:15, 17,18,23 22:3,10,14 23:9,14 24:3,21,22, 24,25 25:2,5 26:4,9,13 27:22 28:4, 8,10,19 30:2 31:12 33:8, 17 38:3,19, 25 39:3,21 44:11,18,20, 22 powered 44:21 powers 36:13 precise 24:23 prepare 7:8 preparing 7:4,12 presidency 8:18
---	---	--	--

previous 25:16 36:20	37:8, 23 39:11 40:18	RAM 30:3	24:21, 22 30:16 37:16, 20 39:21
Previously 6:8 21:3 26:25	provided 19:6	ran 38:2	reducing 23:14, 15 24:24 32:7 44:22
prior 15:12, 20 16:5, 17 17:5 18:17, 23 19:2 33:12	Public 4:6	rapid 22:8	reduction 26:13 32:2
priority 12:11 28:13	published 13:9	rate 13:21 34:19, 20, 22	refer 18:7, 10, 11 27:7, 12 31:7
probably 13:14	pure-play 13:5	read 21:20 23:12 24:18 34:12 36:5, 6	reference 16:3, 7 18:18, 22 19:6 21:2 27:9 41:19
problems 8:22	push 33:13, 15	reading 22:6, 17 25:23	references 17:3 18:17
processing 22:8, 12 24:16 35:10, 23 36:10, 15 37:7, 8, 21, 22 38:10, 14, 19 39:25	put 20:22 27:17 29:5	Reagan's 8:18	referring 5:19, 20 18:2 21:8 31:6 35:16
processor 21:21 25:3 26:19 29:19 31:17 32:24 33:4 35:18 40:19, 20	Q	real 5:24	refresh 30:3, 8 34:18, 23
produce 20:13	question 16:15 21:6 22:19 25:20, 21 28:18 37:11, 24 39:8 44:14	reason 5:12 32:20	refreshed 41:3
producing 25:9	questions 44:10, 15	reasonable 14:8 29:3, 4	regarding 5:15
product 19:11	quicker 27:21 28:17	recall 7:6 18:25 19:5 32:4, 8 38:16 44:9, 13, 14	register 31:18 35:18, 19
products 10:2, 22, 23	quickly 5:25 11:11 41:4	receive 41:20	relate 15:7
professor 10:15	quotation 36:4, 6, 18, 20, 22	received 10:13	related 30:25 34:2 44:15
program 9:6 12:14	quote 24:20 31:17	recent 5:6	relating 44:11
programming 9:11	quoting 36:22	recognize 6:15	relation 20:6
projects 10:5	R	record 4:3 34:12 44:2, 3, 6	rely 16:3
provide 9:12 31:23	R-U-S-S-E-L 4:14	reduce 21:17 22:3, 13 25:4, 5 26:4, 9 28:7 36:13	remaining 38:24
	radar 10:11	reduced 21:15, 18	

remember 12:16 28:12, 14	31:2 32:4,15 33:22 37:18 40:13 43:19	section 16:20	shutting 28:3,19
remembering 13:15	right-hand 18:12	see 15:22 16:21 17:6,12	side 33:7
Rendition 12:17	room 4:19	18:14,19 20:16,25	signal 29:21 36:8
repeating 21:6	roughly 21:20 33:12	27:10,11 29:14,22	signature 6:22
report 41:24	routine 31:7,11,12, 16,20 33:22	30:6,21 31:4,5,8,21	simple 27:20
REPORTER 4:2 43:25 44:5	36:16,21	35:13,21 42:11	simpler 27:16
represent 4:12	run 31:18 35:19 36:15 38:6	seller 13:13	simply 25:4 28:7 40:23
representing 6:4	running 12:25 21:23, 24 23:10	semiconductor 12:16,23 13:3	single 14:3 16:3,7
request 33:3 39:24 40:3	26:4 27:19 28:21 29:7 40:23	send 32:6	site 9:21
requested 32:25 36:15 37:7,21	runs 35:25	sentence 35:5,17	situation 41:21
require 38:14,18	Russell 4:14	serves 5:9 9:5 13:2	situations 41:14
required 22:9	S	set 7:24 22:7	skill 23:13 28:6 41:6,13 43:16
respective 42:8	Samsung 7:11,13 19:7	Seth 4:12 5:24 19:9	skipping 29:24
respond 41:22	save 9:7 39:21	setting 39:13	slated 11:24
resume 27:18 34:2 40:15,16	saying 34:21	shares 28:13	slow 34:18
review 36:19	says 23:4 31:4 35:6 42:23	shorter 28:9	slowed 29:19
Reynolds 8:12 9:15	scenario 37:4,18 42:13	show 16:16	software 9:12
RFID 10:25 11:11 12:4	screen 30:4,9,10	showed 24:23	sort 39:24
right 6:6 7:2 8:6, 8,11 10:8 13:8,16 15:5,17 20:4	search 19:3	showing 30:15	South 13:4
	second 33:10 36:9	shows 16:6	speak 7:13,16
		shut 27:17 36:12 37:5,13,14, 19	speaking 5:15 41:12
			specific

36:10, 14 37:6, 8, 21, 22 38:10, 13 44:11, 14, 15 speed 21:24, 25 22:4, 5, 8, 12, 13 26:14 28:17 31:19 32:11, 24 35:20, 25 38:14 40:23 42:18 speeds 35:10, 24 spent 8:19 stand 11:15 Standards 16:20 Star 8:17, 21 start 7:4 12:23 34:18 started 8:7 starting 17:22 29:12, 17 state 4:13 12:14 21:15 23:9 24:22 39:10, 15, 16, 20 stay 43:11 stop 23:10 stopped 23:20 stopping 20:12, 14 23:11, 16 25:8, 11	strategic 8:20 stuff 12:19 suggestion 17:2 summer 8:13 10:18 support 25:16 sure 19:9 43:24 suspend 20:11, 19, 20 21:9, 11, 15 22:22, 25 23:2, 4, 5, 8, 11 24:2, 4, 10, 14, 16, 20, 21, 22 25:17 27:14, 16, 23 28:2 33:14 38:11 39:10, 15 suspended 24:25 sworn 4:6 system 20:10, 12, 14, 19 21:9, 22 22:10 25:8, 11 26:3 35:9, 11 40:19 42:14 systems 11:25 33:13 42:9 T tablet 14:4 tablets 14:14 tag 11:11, 13	12:4 tags 10:25 11:6 taint 39:7 take 38:22, 24 43:22 talk 8:6 23:11 41:25 talked 41:19 talking 30:15 talks 32:5 33:12 taught 25:3 28:22 teach 16:12 teaches 28:14 36:14 teaching 17:2 25:17 technology 11:17 telling 39:4 tenure 10:14 terms 27:20 test 9:20 testified 4:7 37:15 testify 5:13 37:12, 14 testifying 4:17 testing 10:6 tests 9:25	text 38:5, 15 thank 4:16 18:8 31:6 thing 14:23 28:20 things 9:3, 8, 13 12:25 38:13 40:20 41:9, 15 43:18 think 8:5 14:8 17:19 19:4 23:10, 25 24:17 25:16 29:3, 4, 7 32:18 33:14, 25 40:14, 21 41:11, 12 43:15, 19 third 31:4 thought 24:7 three 20:9, 13 time 5:5 8:16, 17 10:16, 21 12:11 13:8, 17, 19 22:11 28:9 44:15 times 5:4 today 4:17, 20 5:13, 15 top 32:4, 14 36:24 topic 25:19 total 38:23
--	---	---	---

Tower 12:16 track 10:14 transition 44:25 transitioned 12:13 transitioning 13:23 triggers 24:3,4 troubleshooti ng 8:22 true 19:7 36:2 truth 39:4 truthfully 5:13 try 6:6 trying 10:17 11:10 12:22 40:24 turn 6:18 15:23 20:11,13 26:7 33:19 turned 26:20 30:5 turning 13:4 14:24 25:7,10 26:13 turns 26:7 two 7:20 20:11 25:12 type 10:23 21:22 types 32:6 typo 31:3	U U.S. 5:16 understand 16:24 23:14 28:6 33:16 37:24 38:18 41:6,10,14 43:17 understanding 5:17 38:12 understood 16:13 35:8 University 10:15,16 12:15 upload 25:15 user 26:19 29:8 32:23 33:3 42:16 43:14 V VAX 9:2 Vegas 4:18 9:20 versus 38:15 video 30:2,3,5 38:2,15 viewer 26:10 W waiting 32:21,22 wake 27:21 41:17, 22	want 28:7 41:15, 21 Wars 8:17,21 way 22:23,24 23:5 went 10:7,9,18 22:24 winter 9:17 witness 4:5 6:5 43:21 words 17:12 25:21 work 9:2,4,8,16 10:19,24 11:12,19 12:18,24 14:12 19:11 44:17 worked 8:12,22 10:10,12,21, 25 11:2,7,23 12:6,17,20 14:6,15 44:16,22 working 8:7 12:10,15 13:17 14:11 wrote 9:6 Y Yeah 37:11 yesterday 13:11	
--	---	--	--