

U.S. PATENT AND TRADEMARK OFFICE

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ROUNDTABLE ON PATENT SUBJECT
MATTER ELIGIBILITY

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ROUNDTABLE 2: EXPLORING THE LEGAL CONTOURS
OF PATENT SUBJECT MATTER ELIGIBILITY

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MONDAY
DECEMBER 5, 2016

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The Roundtable convened in Paul Brest Hall, Stanford University, 555 Salvatierra Walk, Stanford, California, at 8:30 a.m., Shira Perlmutter, Chief Policy Officer and Director for International Affairs, presiding.

PRESENT

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NATHAN KELLEY, USPTO Panel

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* present via webcast

TABLE OF CONTENTS

Welcome and Introductions.	6
Opening Remarks by Michelle K. Lee	7
Panel One	
Neil Thomas. . . . .	.21
Frank Bernstein. . . . .	.29
Robin Feldman. . . . .	.37
Mark Lemley. . . . .	.44
Peter Su . . . . .	.52
Lee Van Pelt . . . . .	.58
Q&A. . . . .	.64
Panel Two	
Chirag Patel . . . . .	.81
Dorothy Auth . . . . .	.90
Steve Chiang . . . . .	.95
Kevin Noonan	102
James Reed	112
Q&A.	120
Panel 3	
Diane Lettelleir	135
Steve Bachmann	143
Jeffrey H. Dean.	149
Sharon Israel.	157
Kim Schmitt.	164
Eric Sutton.	170
Q&A.	177
Panel 4	
Frank Cullen	191
Benjamin Jackson	197
Konstantin Linnik.	205
Hans Sauer	210
Q&A.	218

Panel 5

Jason Gardner 245
 Allen Lo 247
 Daniel Nazer 255
 Julie Samuels 261

Q&A. 272

Panel 6

Jennifer Kuhn 307
 Colleen Chien 312
 Michelle Fisher 321
 Patrick Giblin 326
 Kim Rubin 335

Q&A. 343

Panel 7

Robert Armitage 367
 David Jones 375
 Peter Menell 380
 Wayne Sobon 392
 Marian Underweiser 400

Q&A. 408

Adjourn. 429

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

2 8:33 a.m.

3 MS. PERLMUTTER: So, I'd like to
4 welcome everyone, say good morning and thank you
5 for joining us. We are pleased to have so many
6 patent experts and stakeholders joining us here
7 in person in Stanford as well as those joining in
8 one of our regional offices or watching online
9 through our web portal.

10 As you know, today's roundtable is a
11 continuation of our previous forum held just this
12 past month on patent subject matter eligibility.

13 Last month, we focused on ways that
14 the USPTO could improve our subject matter
15 eligibility guidance and training examples.

16 And, today, we are seeking a broader
17 perspective on the overall issue of the legal
18 contours of eligible subject matter in the U.S.
19 patent system.

20 Your feedback will help us foster the
21 discussion of this critical and challenging
22 issue.

1 As a brief housekeeping note, because
2 today's event is being transcribed and web cast,
3 I would ask all participants to speak clearly so
4 that we can accurately capture everything that's
5 been said.

6 Each panel today will be followed by
7 a Q&A period for our USPTO panel here to interact
8 with the stakeholder panelists who will be seated
9 over there.

10 And, in person audience members can
11 submit written questions using the cards that are
12 provided at your seats in the room. Please give
13 them to Ken Takeda or Julie Mason who are here in
14 the red shirts.

15 And, those of you who are viewing
16 online can also submit questions using the chat
17 function of the web cast and we will be reading
18 questions from this panel as well.

19 So, before we begin with the first
20 panel, it's my pleasure to introduce the
21 Undersecretary of Commerce for Intellectual
22 Property and Director of the USPTO, Michelle Lee

1 who will be speaking to us via web cast.

2 Michelle?

3 MS. LEE: Thank you very much, Shira.

4 Can you hear me okay?

5 MS. PERLMUTTER: Yes.

6 MS. LEE: Great.

7 Good morning, everyone and thank you
8 for coming to this roundtable discussion.

9 I'm sorry I couldn't be there in
10 person with you today due to obligations that are
11 keeping me in Washington. But, I am delighted to
12 be able to participate remotely.

13 And, I wanted to thank all of you and
14 all the other participants who are participating
15 remotely including via the web and through our
16 regional office, other regional offices, in
17 Dallas, Denver and Detroit.

18 And, what you'll be seeing more often
19 is, as we go forward as we continue to integrate
20 our regional offices into the core work of the
21 Alexandria office, you'll be seeing more
22 opportunities like this to participate from

1 across the country.

2 So, we hope you like it. Give us
3 feedback on how that's working but that's
4 something that you should keep an eye out for
5 going forward.

6 I appreciate all of your attendance at
7 this very important conference, roundtable and
8 topic.

9 As I have said many times during my
10 tenure as Director, our patent system relies on
11 the full and active involvement of the public to
12 help us not only succeed, but to help us lead in
13 today's global innovation economy.

14 Our agency remains committed to
15 strengthening our patent system wherever
16 possible.

17 Like you, we want our patent system to
18 work efficiently and effectively for all of our
19 users so we can continue to promote the
20 innovation that drives our nation's economy and
21 creates jobs.

22 Those are the guiding principles

1 behind our efforts including a pair of roundtable
2 discussions on patent-eligible subject matter
3 that I announced in October. The first, as Shira
4 had mentioned, which occurred earlier this month
5 or last month in Alexandria.

6 Today's roundtable focuses on the
7 current Section 101 jurisprudence and how it is
8 evolving and what is the optimal legal contours
9 of patent-eligible subject matter.

10 And, before we begin, and hear your
11 input, I want to set the stage by briefly
12 describing a bit of background on Section 101 and
13 how we've arrived where we are today with an
14 emphasis on some recent subject matter
15 eligibility cases and their impacts.

16 As far back as 1897, the statutory
17 language defining patent-eligible subject matter
18 has remained largely the same, aside from the
19 1952 Patent Acts arguably linguist change of art
20 to process, the four statutory categories of
21 patent-eligible subject matter, process, machine,
22 manufacturer and composition of matter have

1 largely remained unchanged.

2 For over a hundred years, eligibility
3 has been considered a threshold requirement for
4 patentability, supplemented by the other
5 patentability requirements of novelty, non-
6 obviousness, written description and enablement.

7 While the statutory limits of patent
8 eligibility have largely remained unaltered,
9 innovative advancements across a broad range of
10 endeavors has developed, though, unimagined, more
11 than a hundred years ago.

12 At times, the judiciary has struggled
13 to reach -- with the reach of eligible subject
14 matter to ensure that patent protection extends
15 only to the application of ideas and not to the
16 ideas per se.

17 The adoption of judicially created
18 exceptions precludes the patentability of
19 abstract ideas, laws of nature and natural
20 phenomenon.

21 Drawing the line between patent-
22 eligible subject matter and the non-eligible

1 exemptions has proven, at times, to be
2 challenging for courts, for the patent community,
3 for the Agency, and for innovators, particularly
4 in recent years.

5 That is why we are here today, to
6 receive your viewpoints on this challenging
7 aspect of patent law.

8 Within just the past six years, the
9 Court has left us with a handful of decisions
10 that have significantly impacted patent
11 eligibility law and continues to generate
12 substantial public debate.

13 Starting in 2010 with Bilski, the
14 Court reduced the Federal Circuit's machine or
15 transformation test from an exclusive test to a
16 merely useful test in the eligibility analysis.

17 In that case, the Court held Bilski's
18 claims were invalid because they were directed to
19 a judicial exception, the abstract idea of
20 hedging risk, and added only well-known random
21 analysis techniques which the Court regarded as
22 token post-solution activities or components.

1 Following Bilski, the Supreme Court
2 caught the life science's community's attention
3 in Mayo v. Prometheus when it considered the
4 patent eligibility of a method for optimizing
5 drug dosages for treatment of autoimmune
6 diseases.

7 The Court held that Prometheus's
8 claimed method of determining a given dosage
9 level and whether it's too low or too high based
10 upon the metabolite level was ineligible for a
11 patent as it was drawn to a judicial exception.

12 In making that determination, the
13 Court introduced its two-step test for
14 distinguishing patent-ineligible concepts from
15 patent-eligible applications of these concepts.

16 The first step of the so-called Mayo
17 test considers whether the claims are directed to
18 one of the judicial exceptions to patentability.

19 If a judicial exception is identified,
20 then the second question is whether the claims do
21 so -- whether the claims do significantly more
22 than simply describe the judicial exception.

1 The Mayo test has become the linchpin
2 of the Supreme Court's patent eligibility
3 analysis as made evident in many recent cases.

4 In a second case to impact the life
5 sciences community Association for Molecular
6 Pathology v. Myriad, the Court held that Myriad's
7 claimed isolated gene products useful in
8 assessing hereditary predisposition for
9 developing breast cancer fell squarely within law
10 of nature exception. While acknowledging that
11 claims to a product with markedly different
12 characteristics found in nature may be patent-
13 eligible the Court determined Myriad's genes did
14 not undergo any chemical changes during
15 isolation.

16 The Court did, however, hold that
17 Myriad's synthetically created cDNAs, which
18 differed from the naturally occurring DNA were
19 patent-eligible.

20 Most recently, in Alice v. CLS Bank,
21 the Court applied the Mayo two-step test to
22 analyze eligibility of a computer-based method

1 for mitigating settlement risk in financial
2 transactions.

3 The Court concluded that the claims
4 were directed to the abstract idea of
5 intermediated settlement. And, that mere generic
6 computer implementation did not transform the
7 abstract idea into a patent-eligible invention.

8 During the past two and a half years
9 since Alice, the Federal Circuit has been
10 applying the Mayo test to a variety of
11 technologies invalidating many claimed
12 inventions.

13 The precedent set by the Supreme Court
14 cases has unquestionably impacted the innovation
15 community.

16 I'd like to thank each of today's
17 panelists in advance for discussing the extent of
18 that impact and whether and/or what steps should
19 be taken to further support inventions that we
20 all desire.

21 We're calling on you to help create a
22 public record on Section 101 jurisprudence by

1 providing information on how the Supreme Court
2 and Federal Circuit Section 101 jurisprudence is
3 affecting different areas of technology and
4 whether and to what extent there is any impact on
5 investment in research and development or
6 innovation generally.

7 Additionally, we're calling upon you
8 for comments on whether legislative,
9 administrative or judicial changes are needed or
10 desirable and, if so, what those changes might
11 look like.

12 In sum, today, we continue to assess
13 whether the current state of patent-eligible
14 subject matter law and the accompanying judicial
15 exceptions are best serving innovation.

16 So, I want to thank you all again for
17 attending today and for your contributions to the
18 larger discussion on patent-eligible subject
19 matter.

20 We welcome your input on this complex
21 and important topic.

22 And, with that, allow me to turn it

1 over to our moderator of today's program, Nate
2 Kelley, and thank you all. I look forward to a
3 productive discussion, which I will be watching
4 via the web here in Alexandria, Virginia.

5 Thanks so much.

6 MR. KELLEY: Thanks, Michelle, and
7 thanks for setting us up here today with really a
8 brief and great overview of where we are, at
9 least where I think we are in the 101 space.

10 Before I get started this morning, I
11 just want to introduce those of us from the PTO
12 you see up here today.

13 To my left is Shira Perlmutter. She's
14 the USPTO's Chief Policy Officer and Director for
15 International Affairs.

16 And, to her left is Bob Bahr, the
17 USPTO's Deputy Commissioner for Patent
18 Examination Policy.

19 To my right is Amy Nelson, an
20 Associate Solicitor in the Solicitor's Office
21 with a very deep background in the life sciences
22 area.

1 And, to her right is John Cabeca,
2 USPTO's Director of its Silicon Valley Regional
3 Office.

4 Now, later this afternoon, you're
5 going to see a different of people from the USPTO
6 up here. Some people are going to change out and
7 I'll let them introduce themselves.

8 And, what's happening now on my left
9 with the panel being ushered is, is what's going
10 to happen throughout the day.

11 So, the way we've decided to handle so
12 many people, and we are very happy with the
13 interest that we got, is we're going to have
14 about seven panels of six or seven speakers for
15 each panel.

16 We'll have four panels in the morning
17 with a ten minute break between the first two
18 panels and the second two. Then we'll have
19 lunch.

20 And, in the afternoon, we'll have
21 three more panels.

22 On each panel, each speaker has about

1 seven and a half minutes to speak. If we deviate
2 from that, whoever's moderating will tell you.

3 We do ask the speakers to stay on time
4 as much as possible in order to get through 40 or
5 so speakers in a day, we really can't have each
6 person running over even 30 seconds or a minute.

7 And, to that end, for those of you who
8 ever argued in the Federal Circuit, we have the
9 exact clock that you will see in that courtroom.

10 When the light turns from green to
11 yellow, it means you have a minute left. And,
12 when it turns from yellow to red, it means you
13 have no time left. And, we'd appreciate it if
14 you'd wrap it up at that point and please start
15 wrapping up when you see the yellow light.

16 We'll go through each speaker one at
17 a time, seven and a half minutes each for this
18 panel.

19 For each panel, we've built in about
20 10 or 15 minutes for us to ask questions. If
21 people in the audience would like to suggest a
22 question, there's cards that you can write your

1 question on. And, I think there's people in the
2 regional offices at our home office in Alexandria
3 to also assist in that.

4 We will ask the questions if the card
5 is brought to us and it's not our intent to have
6 a full session question and answer period for
7 each panel. But, if a question comes up, we've
8 built in a little bit of time to ask it.

9 That time is also the time we need to
10 trade out from panel to panel.

11 I think that -- oh, yes, let me say
12 one more thing before we begin.

13 We are very excited with the interest
14 that we got when we put our announcement. But,
15 of course, in addition to the comments that we'll
16 hear today and those that we heard a couple of
17 weeks ago in Alexandria, we also would really
18 like to hear from people in written comments.

19 And, the period for written comments
20 is open and will remain open until January 18th.
21 So, if you'd like to comment, if you hear
22 something today you'd like to reflect on, if

1 you're speaking today and haven't filed written
2 comments, please do so because that's really
3 where we're going to get a lot of very good
4 information.

5 And, so, with that, let me turn it
6 over to the first panel and our first panelist
7 this morning (inaudible due to audio issues),
8 Frank Bernstein.

9 Good morning. Yes? No? Oh.

10 MR. BERNSTEIN: We have a committee on
11 the web.

12 MR. KELLEY: Oh, I'm sorry, you're
13 right. It's right here in front of me. Our
14 first speaker this morning is actually not seated
15 before you here at Stanford but is in Alexandria,
16 Virginia and it's Neil Thomas. And, forgive me,
17 I apologize, Mr. Thomas, please go ahead.

18 We can see him.

19 MR. THOMAS: . . . as our system of
20 commerce has no physical or concrete existence
21 that -- hello?

22 MR. KELLEY: Mr. Thomas? Yes, Mr.

1 Thomas, can you -- can I ask you to begin again?
2 I'm sorry, can I ask you to start over because we
3 had a little technical difficulty here in the
4 room.

5 MR. THOMAS: Okay.

6 MR. KELLEY: We couldn't hear you. I
7 don't know if people online could hear you, but
8 we couldn't hear and I'd like us to get
9 everything you have to say.

10 MR. THOMAS: All right.

11 MR. KELLEY: So, please just go ahead
12 and start over.

13 MR. THOMAS: Okay.

14 Slide two, please?

15 MR. KELLEY: Thank you.

16 MR. THOMAS: Slide two.

17 Alice changed the very definition of
18 abstract. Abstract meaning existing in thought
19 or as an idea, but not having a physical or
20 concrete existence.

21 All of a sudden, our economic system,
22 fundamental economic practices, our system of

1 commerce has no physical or concrete existence.

2 This is absolutely laughable.

3 Next slide, please?

4 Alice did not follow Bilski. Bilski,
5 Flook, Diehr all dealt with mathematical formulas
6 as abstract ideas.

7 Bilski, the opinion, the concept
8 quote, the concept of hedging, quote, reduced to
9 a mathematical formula is an unpatentable
10 abstract idea, just like the algorithms at issue
11 in Benson and Flook.

12 Next slide, please?

13 Alice did not follow Bilski. The
14 opinion in Bilski, like the risk hedging in
15 Bilski, intermediated settlements, quote, a
16 fundamental economic practice all the claims at
17 issue in Bilski were abstract ideas in the
18 understanding that risk hedging was a fundamental
19 economic practice.

20 This is a crucial distinction. The --
21 it extrapolated in a tectonic manner the concept
22 of abstract to our system of commerce. This is

1 not Bilski decided.

2 Next slide, please?

3 Ergo, in light of Alice, advertising,
4 negotiating, selling inventory, ordering,
5 banking, paying, pledging, communicating, keeping
6 records, et cetera are all fundamental economic
7 practices. Ergo, they are all abstract.

8 Examiners indicate that displaying
9 information, collecting and comparing known, and
10 for processing, storing data, electronic record
11 keeping, again, transmitting data over networks
12 are all ineligible abstract ideas.

13 This extrapolation is absurdly
14 ludicrous.

15 Next slide, please?

16 Alice following Mayo introduced an
17 awkward two-step test and totally undefined
18 inventive concept significantly more and nothing
19 of substance. There's no indication whether
20 these are the same or different tests.

21 All of these, are they the same or
22 different or simply a new and useful unobvious

1 process machine or improvement thereof?

2 Next slide, please?

3 Alice is bad law. It is unnecessarily
4 simply adding confusion. Alice could and should
5 have simply been decided using Section 101 and
6 103, performing a well-known fundamental economic
7 practice using a generic computer is likely
8 obvious.

9 Next slide, please?

10 On top of Alice's illogical decision,
11 for over two years, two and a half years,
12 examiners are issuing copy, paste, boilerplate
13 rejections particularly in 705 36 -- on TC 3600
14 art unit.

15 And, managers and supervisors
16 apparently are requiring these rejections even
17 after a complete reversal by the PTAB.

18 Next slide, please?

19 This aberration can be seen where 90
20 percent of rejections and electronic art units
21 have occurred.

22 Next slide?

1 As well as a nearly half of all
2 applications within Alice rejection are assigned
3 to Class 705.

4 Next slide, please?

5 This is e-commerce. This is the
6 Internet. Section 101 is still law. Congress
7 has given no directive to exclude a whole field
8 of processes and machines and inhibiting
9 innovation in e-commerce, improving consumer
10 protection and increased competition.

11 Next slide, please?

12 Digital trade is, in fact, America's
13 third largest category of experts. Intellectual
14 property is a critical element to this trade and
15 software and information services is increasingly
16 important.

17 Yet, Alice and the Patent Office are
18 inhibiting our economic position in global and
19 international trade.

20 Next slide, please?

21 I don't see any red things, so, the
22 Trump Administration is looking for improved

1 protection of America's intellectual property
2 which would produce more than two million more
3 jobs right here in the United States.

4 Next slide, please?

5 After two and a half years inventors
6 particularly in 3600 are unjustly deprived of
7 their intellectual property, unjustly forced to
8 make lengthy and costly appeals, investment
9 capital has been severely impacted and
10 contingency fee patent enforcement litigators
11 have all but disappeared from the marketplace.
12 By the way, they're the ones that help small
13 inventors.

14 Next slide, please?

15 Congress enacted 101 and 103 and are
16 still a law. Circuit Court Judge Newman entered
17 a concurring separate opinion proposed returning
18 to the letter of Section 101, a new and useful
19 process or machine is not an abstract idea.

20 And a trend is clearly appearing in
21 Bascom and Enfish to simply look for unobvious
22 improvements or unobvious improvements.

1 Next slide, please?

2 The Patent Office must require
3 examiners to consider the elements as an ordered
4 combination in light of the specification and
5 look for an inventive concept and, at the same, a
6 new and useful machine or improvement under 101
7 and 103.

8 Examiners must follow MPEP and
9 specifically rebut applicants' arguments, not
10 simply dismiss, quote, applicants' arguments are
11 not persuasive, close quote.

12 Require examiners to consider both the
13 Alice eligibility and, at the same time, 101 and
14 103 tests for patentability in tandem and arrive
15 at the same conclusion.

16 Next slide, please?

17 Automatically audit every Alice
18 rejection with an independent Alice expert
19 including a one-hour mandatory interview, one
20 half of which is to the examiner, one half is to
21 the applicant by the same independent Alice
22 expert.

1 Incentivize and provide consequences
2 for poor, improper rejections.

3 Next slide, please?

4 MR. KELLEY: Thank you very much, Mr.
5 Thomas. I'm afraid we're going to have to move
6 on, but I know that your materials have been
7 provided and on our website and I urge people to
8 refer to them.

9 MR. THOMAS: Okay, thank you.

10 MR. KELLEY: Thank you very much.

11 Our next speaker this morning is now
12 Mr. Frank Bernstein.

13 MR. BERNSTEIN: Good morning. I'm
14 Frank Bernstein. I'm a patent attorney and
15 prosecutor and litigator in the computer
16 implemented inventions area for about 30 years.
17 A patent attorney here and a practitioner here in
18 Silicon Valley.

19 I want to unpack this notion of
20 abstract idea just a little bit.

21 If you'd go to the second slide,
22 please?

1 This is one of the things we're
2 wrestling with in the computer implemented
3 invention area.

4 And, the Federal Circuit in a case
5 which I'm going to go into a little bit more
6 detail, the Enfish case, acknowledged that
7 there's no specific definition, that we're doing
8 this by example, by comparison with other
9 software cases to determine whether or not an
10 idea is abstract.

11 And, one of the issues we have is
12 that, at some level, almost any software-based
13 claim can be said to be directed to an abstract
14 idea, even if something that's overtly physical
15 like controlling a robot or a robot's movement.

16 Next slide, please?

17 So, the Federal Circuit stated out in
18 the Enfish case, and I've got the cites in my
19 slides, quoting the Alice decision saying, we
20 must first determine whether the claims at issue
21 are directed to a patent-ineligible concept.

22 The court went on to say, and this is

1 important, that formulation of the Supreme Court
2 plainly contemplates that the first step of the
3 inquiry is a meaningful one that is, that a
4 substantial class of claims are not directed to a
5 patent-ineligible concept. So that it shouldn't
6 be a reflex action to simply decide that a
7 computer implemented invention is directed to an
8 abstract idea.

9 Next slide, please?

10 The Federal Circuit contrasted this
11 notion of claims being directed to a patent-
12 ineligible concept which is what the language of
13 the Supreme Court with whether the claims involve
14 patent-ineligible concepts.

15 And, the Federal Circuit said, you
16 can't look at whether it involves a patent-
17 ineligible concept because, essentially, every
18 routinely patent-eligible claim involving
19 physical products and actions involves a law of
20 nature and/or natural phenomenon because these
21 things take place in the physical world and
22 that's something that's important to remember.

1 Next slide, please?

2 One of the things I always go back to
3 and I've got a little enough hair on my head and
4 enough gray in my beard to remember when there
5 was a big ever play between software and
6 hardwired processors.

7 And, you know, software is supposed to
8 run on generic hardware. It does what hardware
9 did. We have lots better generic processors now,
10 general purpose processors.

11 I honestly think the Federal Circuit
12 got it right in Alappat 20 years ago when it said
13 every time you program a general purpose
14 processor, you've got a new machine and I think
15 that -- I really think that should be the
16 inquiry.

17 Software is a multi-trillion dollar
18 business in this country and it's supposed to
19 reduce or eliminate the need for special purpose
20 hardware. It's supposed to accomplish what
21 circuits and circuit elements accomplished.

22 Next slide, please?

1 Back to the Federal Circuit decision,
2 I'm bouncing back and forth here just a little
3 bit, but just to give some context for some of
4 the discussion, the Federal Circuit said,
5 software can make non-abstract improvements to
6 computer technology just as hardware improvements
7 can.

8 And that's important. That's this
9 byplay between what software does on a general
10 processor and what special purpose processors,
11 which were much more prevalent back in the day
12 did.

13 The court also said, sometimes these
14 improvements can be accomplished through either
15 route, through software or through hardware. So,
16 it's relevant to ask whether the claims are
17 directed to an improvement to computer
18 functionality versus being directed to an
19 abstract idea, even at the first step of the
20 Alice analysis.

21 In other words, you're not supposed to
22 just gloss over this notion of abstract idea and

1 get to the significantly more thing at the second
2 step of the test. You're supposed to look in the
3 first instance at whether there's an abstract
4 idea and whether there's an improvement to
5 computer functionality, because that can inform
6 the analysis and the conclusions.

7 Next slide, please?

8 We know beyond, you know, beyond
9 discussion that a circuit arrangement is patent-
10 eligible. The patentability analysis, if you're
11 looking at a circuit, proceeds immediately in
12 those kinds of cases, provided that the circuit
13 arrangement is claimed sufficiently clearly and
14 in a manner which defines over the prior art, the
15 claim will be patentable.

16 You don't worry about eligibility or
17 ineligibility.

18 Next slide, please?

19 So, again, looking back at the Enfish
20 case, the Federal Circuit goes on and says, the
21 first step in the Alice inquiry asks whether the
22 focus of the claims is on the specific asserted

1 improvement in computer capabilities. And,
2 that's in -- or instead on a process that
3 qualifies as an abstract idea for which computers
4 are invoked merely as a tool.

5 It's a helpful comment. It's
6 important to remember that general purpose
7 processors are tools. You program them, you have
8 essentially a new machine and that's -- and,
9 you're looking at that as a measure of what the
10 improvement or we should look at that as the
11 measure of what the improvement over the art is.

12 Next slide, please?

13 The whole notion is, it's a software
14 (inaudible due to sound system issues) hardware
15 and the point of having software.

16 I remember from prosecuting Circuits
17 cases, I got transistors, diodes, capacitors,
18 what have you, in various combinations to
19 accomplish certain things and you've got to
20 define those and recite them with sufficient
21 specificity to the define over the prior art.

22 Maybe all we're talking about here is

1 a matter of, instead of just functionally
2 claiming what's going on, have the software
3 recite a little more specifically what it's doing
4 to turn the computer into a new machine. Maybe
5 that's how the software can be shown to be more
6 than merely a tool.

7 And, also, again, a way, maybe that's
8 how the software can be shown to improve computer
9 capabilities.

10 Next slide, please?

11 The question is, does that go far
12 enough? What does it really mean to improve
13 computer capabilities? Does the computer really
14 have to run better?

15 That was the discussion in the Enfish case
16 when they talked about the spreadsheet and how it
17 ran better from the way it was programmed.

18 But, shouldn't it or should it be
19 enough that the programmed computer just simply
20 does its intended job better? If you wind up
21 program a processor that's running -- that's
22 controlling the movement of a robot and you

1 improve the control with better programming, why
2 not look at that in comparison with the prior art
3 instead of deciding that it's abstract idea?

4 In that context, what is it that I
5 have to be able to show and do I have to be able
6 to show that the software improves the
7 functioning of the computer? I don't think so.

8 And, that's really all I have. Thanks
9 very much.

10 MR. KELLEY: Thank you very much, Mr.
11 Bernstein.

12 And, our next speaker this morning is
13 Robin Feldman.

14 Professor?

15 MS. FELDMAN: Thank you.

16 I'm Robin Feldman, Professor of Law at
17 the University of California Hastings.

18 One of the great joys of being an
19 academic is the ability to speak with candor.
20 And, so, I offer my remarks this morning in the
21 spirit of that hallowed tradition.

22 In law, as in so much of life, there

1 is an arc of history. We may move forward with a
2 slow and fitful gait, but the trajectory is often
3 clear. The question for this agency, it seems to
4 me, is whether to follow at arc or to push
5 against it?

6 With patentable subject matter, the
7 modern arc began with the first of the quartet
8 Alice cases, Supreme Court cases, and with each
9 step, some in the bench and bar had tried to wipe
10 it away, explaining why the trajectory was no
11 more than an optical illusion, couldn't be, it
12 mustn't be, and I confess, there are times when I
13 have joined that chorus as well.

14 This has had no more effect than
15 whistling into the wind. And, there is little
16 reason to believe that pressing against the arc
17 of history will be any more successful going
18 forward than it has been in the past.

19 Now, for example, after Bilski, we
20 said, the court didn't eliminate machine or
21 transformation, so everything is pretty much
22 business as usual.

1 With Mayo and Myriad, the refrain was,
2 that's only for life science cases.

3 And, since Alice, the refrain has
4 been, they didn't ban software patenting, so
5 we'll find a way.

6 Many Circuit decisions during this
7 quartet period have come perilously close to what
8 I would call reversal from below. And, through
9 the entire time, the fervently whispered prayer
10 has been that the Supreme Court will get tired of
11 patent law or tired of being criticized and will
12 leave us to do what we do best.

13 But, the Justices have not tired of
14 patent law and, in fact, patent law continues to
15 occupy a remarkable amount, an unusual amount of
16 their docket.

17 And, reversal from below is a
18 treacherous path, one that is usually
19 unsuccessful in the long run.

20 The latest wave of Federal Circuit
21 decisions, software decisions, again, pushes back
22 on the Supreme Court's trajectory.

1 Yes, many, many software patents have
2 been invalidated under Alice. And, its two-step
3 process in which a court must first determine
4 whether the claim is directed to a forbidden
5 category such as abstract ideas.

6 And, then, second, whether the claim
7 adds significantly more.

8 But, after taking some time, the
9 Federal Circuit has found ways to ease the two-
10 step tango.

11 The Amdocs case opined that there is
12 no workable definition of an abstract idea.

13 The Enfish case held that courts must
14 be careful not to apply too high a level of
15 abstraction.

16 And, the McRO holding is best summed
17 up by the patently old headline, step one, don't
18 assume an abstract idea.

19 Now, as much as one might hope, it is
20 hard to imagine that this wave of Federal Circuit
21 decisions will be greeted any more warmly by the
22 Supreme Court than the last.

1 Though, some on both sides of the
2 question of how broadly patents should reach have
3 hoped that Congress will intervene either by
4 overturning the Supreme Court subject matter
5 decisions or accelerating and enhancing the
6 court's decisions or even cutting back on aspects
7 of post-grant review from the American Invents
8 Act.

9 None of the tea leaves, however,
10 suggest that Congress is likely to weigh in at
11 this point.

12 So, what's an Agency to do as it is
13 buffeted by the winds of this less than cordial
14 interchange between two levels of the judiciary?

15 And, of course, the Agency itself may
16 have internal cheering sections for particular
17 viewpoints, not to mention pressure from those
18 who use its services.

19 The Patent Office, however, has an
20 unusual level of responsibility as an agency
21 given the 20-year lag time once a patent has been
22 granted and the nature of modern patent markets.

1 For example, there was a time we could
2 say with confidence that 90 percent of patents
3 would never garner a return. Those shadow
4 patents hovered on the periphery of the
5 innovation system doing little damage.

6 But, the world has changed. With
7 modern secondary markets, patents are easily
8 traded, grouped, launched as a bundle against
9 product producing companies.

10 In particular, this fall's Federal
11 Trade Commission Report on Patent Assertion
12 Entities concluded that, for an entire category
13 of players in the patent market, the business
14 model is a nuisance one.

15 And, while the number of patent
16 lawsuits has gone up and down in the last few
17 years, the down years are still vastly above the
18 number eight years ago, even accounting for
19 changes brought about by the American Invents
20 Act.

21 The burden on innovation industries is
22 not small. As we sit here in Silicon Valley, I

1 note that the work of many scholars has carefully
2 documented the damage modern patent assertion is
3 causing for startups and small enterprises, not
4 to mention more mature companies.

5 And, the Patent Office has come into
6 more than its fair share of blame.

7 The 2013 GAO report pointed at poor
8 patent quality as a cause of pain in the patent
9 system.

10 And, the problems are not just in the
11 tech industry, weak life science patents
12 contribute to schemes that are fueling popular
13 outrage about rising drug prices.

14 In short, the burden on the Patent
15 Office to get it right is great. And, when the
16 Agency follows the ebb and flow of the battle
17 between different levels of the judiciary, that
18 strategy can leave long term damage in its wake.

19 The rules may change when the Supreme
20 -- when the issues reach the Supreme Court, but
21 for patents granted in the interim, there is a
22 20-year tail.

1 Thus, I urge a large dose of caution.
2 The temptation to jump forward as the Federal
3 Circuit pushes back on Supreme Court doctrine,
4 misses the arc of history.

5 And, while we may not like it, the arc
6 of history is clearly there for us.

7 Thank you very much.

8 MR. KELLEY: Thank you, professor.

9 And, now, we'll hear from Mark Lemley.
10 Professor Lemley?

11 MR. LEMLEY: Thank you.

12 My name's Mark Lemley. Welcome to
13 Stanford. I teach law here at Stanford. I'm
14 also a partner at the law firm of Durie Tangri
15 where I do patent litigation.

16 So, I want to agree, at least,
17 conceptually with Robin, although I think we
18 might disagree about some specific applications.

19 I want to agree with Robin in saying
20 that I hear and understand the frustration with
21 the Alice test, the claims that it is a
22 historical, the claims that it doesn't draw great

1 lines.

2 I think as a practical matter,
3 complaining about it is not actually going to do
4 very much.

5 And, I also think as a practical
6 matter, something very interesting has happened
7 in the two years since Alice, which is, even
8 though I find Section 101 jurisprudence
9 intellectually offensive because there doesn't
10 seem to be a there there.

11 The courts, I think, are actually
12 engaging in a common law process that, with some
13 exceptions, mostly in the software world, at
14 least, gets them to the right result in
15 particular cases.

16 So, there was a lot of panic and
17 concern after Alice. I think, that, well,
18 nothing's going to be patentable in the software
19 in the business method world, but I think we're
20 starting to see the development of a common law
21 jurisprudence that actually does draw some
22 distinctions that we can look to in trying to

1 understand what's going to be patentable and
2 what's not.

3 And, so, I part ways, I think, with
4 Robin in -- on the question of whether or not a
5 case like Enfish, for instance, is flying in the
6 face of the Supreme Court jurisprudence.

7 I actually think the Supreme Court is
8 not -- did not intend, right, and would not hold,
9 if it were presented with the question, that
10 software is not patentable or that software's not
11 patentable unless there's new hardware attached
12 to it. As Frank points out, that's a kind of
13 distinction that doesn't make a lot of sense as a
14 scientific matter.

15 I do think the court was reacting to
16 a very real problem, which is that we have a
17 whole bunch of patents, particularly issued in
18 the 1990s and the early 2000s that are written in
19 extremely broad functional terms that don't claim
20 a particular way of improving the operation of a
21 computer or a particular way of using a computer
22 to improve the operation of something else, a

1 particular algorithm.

2 They claim any computer programmed in
3 any way to achieve a result. And, the problem
4 with those claims is precisely that they are not
5 directed to a technological improvement, even if
6 they encompass, even if they started from a
7 technological improvement, we have all as lawyers
8 for many years, told people write your claims as
9 broadly as possible, reach as broadly as
10 possible.

11 And, those claims made it into the
12 courts where, it turned out, that the courts were
13 not terribly well equipped to deal with them
14 using standard tools.

15 And, it's right, I think,
16 intellectually, to say, obviousness can take care
17 of this problem. Maybe Section 112 can take care
18 of this problem.

19 But, we've designed the legal system
20 in litigation in such a way that you're not going
21 to get to that conclusion until the very end of
22 the process. You're going to hand it to a jury,

1 you're going to spend several million dollars in
2 the process of getting there.

3 And, for the business model that Robin
4 talked about, where the goal of filing the
5 lawsuit is to impose costs on the defendant in
6 order to get a cost of value nuisance settlement,
7 these patents were gold. Right? Everyone
8 infringes them because they cover any possible
9 way of achieving this result.

10 And, while they are probably invalid
11 for obviousness or enablement at the end of the
12 day, it's going to be a long, expensive and
13 uncertain process to get there.

14 So, the patentable subject matter case
15 law, while I find it intellectually unsatisfying,
16 has had in software a mostly desirable practical
17 effect, which is, it's allowed us to weed out at
18 an early stage a number of claims that should die
19 on some ground.

20 And, if you look at the cases, the
21 patents that have died since Alice in the Federal
22 Circuit, honestly, most of them deserve to die.

1 Those claims were too broad. Those
2 claims were not, in fact, written to be designed
3 to a specific technology.

4 The worry that we had, which was, is
5 this just going to sweep too broadly, are we
6 going to reach all software? Are we going to
7 reach claims regardless of how they're written
8 and how they're narrowed?

9 I think that worry is now looking less
10 and less problematic as we see a bunch of Federal
11 Circuit cases from within the last year that
12 actually draw a distinction between inventions
13 that are directed to -- patent claims that are
14 directed to an algorithm to a specific approach
15 to an actual improvement in computer technology.

16 Those claims are surviving 101 in the
17 patentable -- in the Federal Circuit. And, I
18 think deservedly so.

19 Now, that's a common law process.
20 Right? Courts are good at, lawyers are good at
21 looking at 30, 40, 50, a 100 examples, seeing
22 which ones get held unpatentable, seeing which

1 ones get held patentable and get a coming up with
2 a kind of rough set of standards that's going to
3 give us an instinct as to which bucket each claim
4 is going to fall into in the future.

5 That instinct should get better over
6 time. That analogic reasoning is what lawyers
7 do. It's what litigators do.

8 It doesn't provide us with
9 particularly useful rules and I think that's a
10 problem for the Patent Office. Right? Because
11 if the goal is to write guidelines that examiners
12 who are not lawyers versed in analogic reasoning
13 can use to decide, hey, this claim is more like
14 Enfish than it like TLI Communications.

15 That guidance, I think, is never going
16 to be simple and easy to write. I mean, you can
17 use examples, you can use analogies, but it's
18 hard to say, okay, here's how you apply the two-
19 step test and here's what falls in each bucket.

20 Because I think we're doing it not by
21 applying a simple legal rule, I don't think there
22 is a simple legal rule. We're doing it by

1 looking at a kind of estimate of how
2 technological the invention is. And, I think
3 technological includes not just hardware, but
4 software, properly so.

5 Is this patent actually directed at a
6 new software approach? Is it directed at a new
7 algorithm? Is it directed at a new
8 implementation of a computer technology that
9 allows you to do something different?

10 I do think that we can learn some
11 practical lessons.

12 First, the broader the scope of the
13 patent is, the more problematic it's likely to
14 be. The abstract idea concept, I think, is
15 directed not so much at is it removed from the
16 physical world but is it claimed at a level that
17 cuts across physical world boundaries that does -
18 - where it doesn't matter how I implemented in
19 the software.

20 And, second, I think we can pay a lot
21 more attention than we have in the past to
22 functional claiming.

1 A lot of the patents that are most
2 problematic are problematic because they are
3 written in functional terms. Anything that
4 achieves this function, but have not been subject
5 to the traditional rules of Section 112(f).

6 But applicants and examiners can use
7 Section 112(f) to narrow down claims to specific
8 technology, assuming the patent application
9 actually describes specific technology.

10 And, in the course of doing that, I
11 think we can at least make the software world a
12 better place.

13 MR. KELLEY: Thank you, professor.

14 So, next, we'll hear -- sorry, thanks
15 professor.

16 So, next, we'll hear from Peter Su.

17 Mr. Su?

18 MR. SU: Okay, thank you.

19 Good morning. My name is Peter Su.
20 I'm a partner at Dentons Silicon Valley office.

21 And, before, you know, going to law,
22 I worked as a design engineer in Silicon Valley.

1 The view I express here are my
2 personal views, not my firm's position on this
3 topic and my perspective, mostly based on my
4 personal observations working with the inventors
5 in engineering rather than in life sciences.

6 So, picking up on the point that
7 Professor Lemley talked about useful rules, I
8 have three points to share.

9 So, first, the Alice framework of
10 abstract idea is difficult to comprehend and
11 apply by the inventors in the high tech industry.

12 In determining patent eligibility
13 under the Alice framework as to whether the
14 claims are directed to an abstract idea.

15 This is a framework that's hard for an
16 engineer to understand and provide comment. So,
17 the concept of whether an idea is abstract as the
18 framework to determine 101.

19 So, when we analyze whether an
20 invention is compared to, if we analyze an
21 invention is new or obvious, engineers frequently
22 are able to provide helpful comment on the

1 technical differences between an invention and
2 the prior art.

3 However, if you were to ask an
4 engineer whether the concept is abstract or not,
5 the engineer will likely be somewhat perplexed
6 and not be able to provide his or her opinion.

7 So, whether if something that's
8 abstract or not is typically not a concept as
9 taught or understood in engineering schools or in
10 the high tech industry.

11 So, a patent, it's a legal/technical
12 document that's directed to and to be understood
13 by one of ordinary skill in the art.

14 If an average engineer is not able to
15 discern whether an invention is an abstract idea,
16 then the Alice framework in determining patent
17 eligibility would be difficult to apply in the
18 real world.

19 The second point, the Alice framework
20 is phrased in the negative, which, again, makes
21 it difficult to apply in practice.

22 So, for example, if you look at 102

1 and 103, under 102, you can obtain a patent if
2 the claims are novel.

3 In section 103, a patent is patentable
4 if it's not obvious.

5 So, under these two statutory
6 sections, we are seeking for characteristics that
7 are new and are not obvious.

8 By and large, most engineers are able
9 to analyze and operate in that framework.

10 But, in the Alice 101, the patent is
11 patent-eligible if it is not an abstract idea.

12 So, stating -- rather than stating
13 what it is, the Alice framework is stating what
14 is not.

15 So, as an analogy, if I was to say
16 that the fruit that Jill likes is not apple, then
17 that fruit could be orange, pears, grapes,
18 strawberries or other forms of fruit.

19 Because, the Alice framework is
20 articulated in the negative, we have the courts
21 that have different ways of interpreting the 101
22 and gravitating toward the claims that are

1 abstract.

2 Okay, which is reflected in the
3 statistics in, you know, many of patents been
4 invalidated or to patent applications that's been
5 rejected.

6 My third point, actually, is more
7 coming from an international perspective.

8 So, I thought the Alice decision is
9 really domestic U.S. issue. I think it is
10 interesting to note from an international
11 perspective.

12 So, as Professor Lemley talked about
13 the, you know, the large number of software
14 process method panel will 2000 and, in part, I
15 think, after the State Street Bank, you could say
16 that the, you know, at the opening of the
17 flicker, you put business method, Pan has
18 somewhat contributed the venture investment in e-
19 commerce, social networking and the sharing
20 economies.

21 I have several panel attorneys coming
22 to me back then that they really like the US

1 patent assistant because it helps these companies
2 to protect their investments that's made into the
3 company.

4 So, while we're having an active
5 discussion as to the patentability into our --
6 the Alice decision, China has proposed a revision
7 to the patent examination guideline to allow
8 patenting of business models under Article 25.

9 So, the proposal is that the
10 requirement would be patented business models now
11 need to include business methods and rules but
12 also technical features. So, you know, this
13 proposed legislation would, if it gets passed,
14 then would, I guess, somewhat motivate the --
15 sort of the landscape on how to, you know,
16 companies filing software patents.

17 MR. KELLEY: Okay, thank you very
18 much, Mr. Su.

19 And, our last speaker on the panel
20 this morning is Lee Van Pelt.

21 Mr. Van Pelt?

22 MR. VAN PELT: Thank you very much.

1 I'm a patent prosecutor and I also am
2 an adjunct professor at Berkeley.

3 The two-part test presents the Patent
4 Office with a daunting task. And, I think Mark
5 has stated that very well.

6 You look at these 101 cases and very
7 smart law clerks help smart Judges write
8 opinions. They may go on for 20 pages.

9 And, at the end of the day, I'd say
10 probably half the people in this room would
11 complain about the opinion and perhaps say it's
12 very hard to understand or it's inconsistent.

13 The Patent Office has to make that
14 determination literally thousands of times a
15 month with a staff of hundreds of examiners.

16 I guess my first input primarily is
17 that, whatever time and resources the Patent
18 Office is spending on the guidelines is
19 absolutely worth it.

20 And, in my view, I don't know who's
21 writing them, but I think they're doing, in
22 general, a very good job of synthesizing the case

1 law into guidelines that someone who has to make
2 this decision several times a day, potentially,
3 with applications can follow.

4 The task is hard. There sort of is an
5 arc in the cases, but the arc is, I think, as
6 Mark has pointed out, actually a pendulum. It's
7 not as simple as looking at the lower courts
8 versus the Supreme Court.

9 I mean, you look at, you know, cases
10 that are pro-eligibility like Diehr and
11 Chakrabarty and you have to score those with
12 cases that are the other side like Benson and
13 Flook. That is hard.

14 The approach the Patent Office seems
15 to be taking in the guidelines with respect to
16 the first question is, what is abstract, is to
17 look at examples and try to sort of compare
18 whether the claim under consideration is similar
19 to claims that have been dealt with by the
20 courts.

21 I think that's really all you can do.
22 And, I think, in the guidelines, to the extent

1 that examples are included and the examples are
2 synthesized from what's in the court case, that
3 is very, very helpful to examiners and it's very
4 helpful in the process of prosecuting a patent to
5 be able to have those.

6 The recent -- and the life science
7 examples put out in May, I think do a very good
8 job of pulling facts from the cases, particularly
9 the Mayo case. And, you know, writing them as
10 different claims, example claims that you can
11 look at and try to understand the sort of things
12 to put in a claim that's going to work and the
13 sort of thing that's not going to work.

14 And, I guess my main input or request
15 is more of that. It's very helpful.

16 I'd also add, there are a lot of
17 academics in the room. Probably the best class I
18 had this year, I've had in prosecution class was
19 going through those examples and asking the
20 students to debate because every one is sort of
21 like a question presented, eligible or ineligible
22 and the answer is given.

1 And, as a teacher, you know, my
2 greatest fear is being boring. And, at least
3 that class, it wasn't boring.

4 And, I'd urge, if you get anything
5 from my remarks, I'd say it's really worth
6 spending a significant amount of time with the
7 PTO materials and guidelines and examples because
8 they are a good way to try to practically deal
9 with this issue.

10 I'm sorry that I can't really
11 enlighten you more on what abstract means because
12 I struggle with it also.

13 Now, on the second part of the test,
14 what is something more? That question's actually
15 almost as hard, I think.

16 But, my understanding of it has been
17 improved by looking at the guidelines. And,
18 they've pulled some language from the cases that
19 it's something that's not well understood,
20 routine or conventional.

21 And, it's very interesting, I think
22 the person who synthesized that noticed it in

1 whether it's Alice of Bilski or Mayo, there
2 usually is a comment in saying why something's
3 abstract and not patentable that it's also, it's
4 just well understood, routine, conventional,
5 something of that sort.

6 Now, as an engineer, that interests me
7 because it's sort of sounding like something that
8 can have some practical utility in that, when I
9 think of those three things, well understood,
10 routine or conventional versus obvious, it sounds
11 a little bit like a coarse filter and fine
12 filter.

13 And, I think examiners, some really
14 effective examiners, I've seen them kind of use
15 it that way. That, they don't have to spend the
16 resources to do a specific search on certain
17 things.

18 They, you know, they use the 101 and
19 they talk about something being well understood,
20 routine and conventional. It's up to you if you
21 want to argue that something that really is
22 routine is not routine.

1 But, usually, I think the practitioner
2 will yield and it saves time. And, that's
3 something I want to emphasize that's very
4 important in the Patent Office making this 101
5 determination because very minute that the
6 examiner spends having some sort of philosophical
7 argument about what's abstract and what's not
8 abstract, and there have been some great papers
9 written on trying to answer that question.

10 But, every minute the examiner spends
11 on that is a minute the examiner doesn't have to
12 search the prior art, analyze the claim and
13 improve patent quality which is ultimately, you
14 know, to my clients that have to deal with
15 patents, you know, that are served against them,
16 clarity and patent quality is, I think, of utmost
17 importance.

18 So, as, again, my main comment is, the
19 time spent on the guidelines is absolutely worth
20 it. The time spent on the examples is absolutely
21 worth it.

22 And, to the extent that that can help

1 the examiner to save time is two ways.

2 One, to have sort of good examples so
3 that the first part of the test can be
4 efficiently dealt with.

5 And, then, secondly, so the examiner
6 can use it as a tool to sort of sweep out the
7 kind of really routine conventional part and move
8 on to the part that really requires a prior art
9 search for the obviousness part. I think that is
10 a way that it can be a useful tool for
11 examination.

12 Thank you.

13 MR. KELLEY: All right, thank you very
14 much, Mr. Van Pelt.

15 So, we have some time for some
16 questions and I'm going to start it off myself
17 with a question for Mr. Bernstein.

18 In your robotics example, and this is
19 something that has bothered me for a while when I
20 look at cases like *Diamond v. Diehr* and moving
21 forward, how the Supreme Court continues to shape
22 the law.

1 What is the nature of the invention in
2 your example? And, is that a valid question? In
3 other words, is the invention new software? Is
4 the invention a new program computer? Or is the
5 invention a new robot? And, is that a valid
6 question to be asking? And, if so, how does one
7 answer that question and in what context should
8 be answered, if at all?

9 MR. BERNSTEIN: It's a valid question
10 and it's a good question. I think you can look
11 at it as potentially a new robot or as a new
12 computer.

13 And, it's interesting. One of the
14 things about the robot example, I mentioned the
15 Alappat case that was decided 20 years ago. And,
16 in that case, the Federal Circuit found
17 patentable subject matter.

18 A case decided the same day was In re
19 Warmerdam. And, that had to do with controlling
20 a robot. And, that was found to be patent-
21 ineligible. And, when you looked at the claim,
22 you saw that it was a bunch of equations, nothing

1 was done with the equations.

2 And, so, in that case, I think it was,
3 you know, like the Flook case, for example, I
4 think appropriate to say that's not patentable or
5 patent-eligible subject matter.

6 But, in the case of, you know,
7 controlling a robot, if you integrate, if you say
8 how you're improving the control of the robots
9 appropriately and you mention what you're doing
10 with the calculations, whether, you know, you've
11 got a bunch of algorithms and stuff in it, kind
12 of like Diehr, that ought to be patent-eligible.

13 So, to come back to your question, I
14 think it's either -- it's a new robot or it's a
15 new computer. I think either of those questions
16 is appropriate to ask.

17 MR. SU: Yes, can I add to that?

18 MR. KELLEY: Yes, please.

19 MR. SU: Yes, because I also do work
20 in robotics and I find robotics to be one of the
21 more complicated technology I've worked.

22 And, I think unlike electronics and

1 software, robotics, you actually involved high
2 level software with low level software
3 interacting with rods to control the different
4 articulation in the mechanical.

5 So, I think all that together, I think
6 probably presents a stronger case for
7 eligibility.

8 MR. KELLEY: Does anybody -- I'm just
9 curious, does anybody on the panel think that the
10 Diamond v. Diehr case would be vulnerable under
11 today's case law with the way, as Professor
12 Lemley put it, the common law has evolved? Is
13 that case just as strongly favorable to
14 eligibility today as it was when it was decided?

15 MR. LEMLEY: I think it is less
16 strongly favorable to eligibility. So, I'll note
17 two things. Right?

18 One is that, from any practical
19 perspective, Diamond v. Diehr overruled Parker v.
20 Flook. They were two different 5/4 majorities
21 where one Justice switched. They said
22 inconsistent things.

1 And, a lot of the confusion that's
2 come out of the Supreme Court's case law has been
3 the Supreme Court's insistence on trying to
4 reconcile both of those cases as having good law
5 when they say the opposite thing.

6 In Alice, the way they reconciled the
7 two was really quite interesting which is they
8 introduced into the history of Diamond v. Diehr a
9 specific new piece of hardware and said, well,
10 Diamond v. Diehr was patentable because it had
11 this specific new piece of hardware that was not
12 actually present in the claims of Diamond v.
13 Diehr.

14 So, the result of that, I think, is
15 that the way the Supreme Court is thinking about
16 Diamond v. Diehr and the Alice case I think is
17 actually a much narrower proposition than what we
18 all would have thought Diamond v. Diehr stood for
19 when it seemed like it was overruling Parker v.
20 Flook.

21 MS. NELSON: So, I have a question
22 from the floor for Ms. Feldman.

1 And, that is, if you're -- as you seem
2 to be advocating that the recent case law is
3 actually sort of hitting the right balance in the
4 software world, how are small startups supposed
5 to sort of get themselves going and have adequate
6 funding?

7 And, I will follow, I think, a second
8 question is in part to that is, Mr. Su talked
9 about international norms and other countries
10 sort of taking different approaches. And what
11 are, I guess, the international concerns with us
12 being out of step with the rest of the world? Is
13 that something that should be driving this?

14 MS. FELDMAN: Sure.

15 So, I suspect the question is worry
16 that if you can't -- if you're cutting back on
17 software patents and you're a little guy, isn't
18 that bad for us? How can we get started?

19 And, the patent is a difficult world
20 for the small guy. You get buffeted in both
21 directions. It's difficult to get started and,
22 on the other hand, there is a lot of data showing

1 that a target of patent assertion is the startups
2 and that hurts them and their ability to raise
3 money.

4 So, there's a wonderful wealth of data
5 that's come out in this last two years. The
6 bottom line is that patent is a difficult world
7 for the small person.

8 I do believe, and what I hear
9 increasingly from people in Silicon Valley is
10 that patents are less important for the funding
11 than they have been historically.

12 In part because things change so
13 quickly in terms of how new software comes out
14 and in part because of this buffeting back and
15 forth that's happening the court.

16 So, I think that, I see, as a silver
17 lining for the folks in software.

18 I know it is tempting. I work in a
19 program with software -- with startup companies.
20 We provide free legal work for 60 companies a
21 year. I understand their pain intensely.

22 We also have to step back and ask

1 what's happening in the patent system as a whole
2 and not let one piece of it, and our concerns
3 about that piece of it, blind us to what's
4 happening in the full system.

5 MR. LEMLEY: Could I add briefly to
6 that?

7 MR. KELLEY: Sure.

8 MR. LEMLEY: So, I think in the
9 software world, there are, I think there are
10 concerns about will people fund the software
11 companies, although it's an empirical question.

12 I don't think we've seen a drop off,
13 Alice related drop off or a move of out of
14 software in the venture capital world. But,
15 that's something obviously that academics should
16 be testing.

17 From the engineer's perspective, I
18 think it might actually push in the opposite
19 direction. The people who hate software patents
20 the most are software programmers. And, while
21 that's not universally true, it is overwhelmingly
22 true in Silicon Valley.

1 So, I don't think people are choosing
2 not to start companies because they don't think
3 they will get a patent in the software world.

4 Now, I do want to say, this panel has
5 been focused very heavily on software. I think
6 in the biotechnology world, we have a very
7 different situation.

8 I think the law is less clearly moving
9 towards a resolution that's kind of --
10 distinguishes good from bad patents. And, I
11 think it's also much more important that you have
12 patent protection in the biotech industry because
13 the expense is higher, because the lead time is
14 longer.

15 And, so, there, I much more worried
16 about the possibility of losing startup
17 investment.

18 MR. SU: Can I also add to that?

19 So, I think from China international
20 perspective, I think the, you know, commentators
21 including the AIPLA view that, I think if this
22 revision to the Chinese patent law passes, then

1 essentially, China would permit a business or
2 business method patents with the technical
3 feature.

4 Essentially, I think the way they
5 drafted it is to take it up of what's the
6 equivalent of 101 and then they're just going
7 through the -- to the anticipation and now
8 obviousness analysis.

9 The other kind of situation says that
10 you are kind of asked in terms of the
11 international framework is in terms of how many
12 other countries have sort of examined under 101,
13 whether it is in China, Japan and Germany?

14 I think, as most of you know, they
15 still operate in a different framework with the
16 technical problem, solution and effect.

17 So, I don't know if that's on point
18 that the U.S. would actually look at just like
19 with the patent filing with some sort of
20 harmonization that we would actually take into
21 account what other countries applies to 101.

22 MR. KELLEY: Sure.

1 MS. FELDMAN: So, I appreciate Mark
2 reminding us that it's not just tech, that it's
3 also life sciences that we have to worry about.

4 And, it's much more fun when Mark and
5 I can agree. But, this one, I'm going to
6 disagree a little bit on because I've testified
7 twice in Congress in recent months about the
8 schemes that are driving prices up in the drug
9 industry.

10 And, not all of those, but some of
11 those, are based in weak patents, what I call
12 life cycle management games. What I call -- lots
13 of people call that.

14 That is happening within the patent
15 world as well. And, it is as important there to
16 make sure that we have appropriate and clear
17 boundaries on the patents granted as it is in
18 tech.

19 MR. VAN PELT: I believe the best way
20 to handle those patents when you say a weak
21 patent, I think that's a 103 question. And, 103
22 is the best way to deal with that problem, it's

1 the best filter.

2 MR. KELLEY: Does anybody else on the
3 panel up here have a question? I have one final
4 one.

5 So, this came from the audience and
6 paraphrasing a little bit. But, the question is,
7 do you think that the courts have turned
8 abstractness into a binary concept? And, is that
9 driving some of the difficulty in analysis?

10 Something's either abstract or it's
11 not abstract. That's a hard thing to get your
12 head around, at least for me.

13 MR. LEMLEY: It is a hard thing to get
14 your head around. I mean, I see -- I guess I see
15 it slightly differently, maybe not, I mean, I
16 don't know that I disagree with that statement.

17 I think the way we've structured the
18 Alice test causes us to go look for the abstract
19 concept in every patent claim. And, that seems
20 to presuppose that there is an abstract idea.

21 And, you know, at some level, that
22 might be right. But, I think the kind of search

1 for the abstract idea may cause us to find it
2 even when it's not really present in the claim or
3 the claim is at least not limited to it.

4 And, so, there have been a couple --
5 I think Enfish, in particular, pushes back
6 against that in a useful way and says, hey, we
7 can't assume there is an abstract idea that we're
8 then looking to jump immediately to step two.

9 So, I, you know, yes, I mean, I guess
10 it is a binary choice in a sense, but we might be
11 better off with the binary choice than the
12 alternative which is kind of let's assume that
13 there is an abstract idea and pull that out in
14 every case because not every patent claim sort of
15 ought to -- is directed to something abstract.

16 MR. BERNSTEIN: I'd take that a step
17 further and maybe, you know, flip it and say
18 maybe assume that there is not an abstract idea.

19 I think a lot of this stuff, when you
20 pull out what's been, you know, what's been done
21 by hand or what's been done and just do it on a
22 computer, that's a matter of novelty or

1 obviousness.

2 And, I think that that's an
3 appropriate space in which to deal with this.
4 Put the thing in front of the Patent Office,
5 you've got, you know, however it's claimed,
6 functionally or otherwise, and see whether
7 there's prior art.

8 You know, I kind of agree with Lee
9 that you should spend the time looking for prior
10 art to see whether an invention is patentable and
11 not spend as much time on this abstract idea and
12 notion.

13 MS. FELDMAN: Yes, I think the court,
14 the Supreme Court did think that abstract was a
15 fairly binary notion. And, I certainly think
16 that they felt they had a definition.

17 So, I don't think that they will
18 warmly greet the notion that the tests that
19 they've given has no workable definition. I
20 think there will be some fireworks when that
21 issue goes up and that we should anticipate that.

22 But, this is not the first time that

1 an appellate court and the Supreme Court have
2 faced off on which one is the greater expert. We
3 saw this in the '70s with the D.C. Circuit and
4 the Supreme Court over which one understood
5 administrative procedure better.

6 The Supreme Court generally wins.
7 And, we might want to keep this in mind along the
8 way.

9 MS. PERLMUTTER: Let me ask one
10 international question.

11 So, Mr. Su and some others have talked
12 about the different approaches to this issue
13 internationally and, whether in Europe or in
14 other countries.

15 And, we had a question from our web
16 cast audience that talked about the value of a
17 comparative analysis of the same cases by the
18 USPTO and by the EPO.

19 So, my question is, do you agree that
20 that kind of analysis and that kind of comparison
21 would be useful and/or relevant?

22 MR. VAN PELT: Well, I think that

1 comparison is very useful and it's -- one of the
2 ways to sort of try to get your head around
3 what's abstract and what's not is this notion and
4 in Europe of the technical effect.

5 And, so, I think there is a union
6 between things that have a technical effect and
7 things that are not abstract. And, so, that is
8 not so much taken up by our courts, but I think
9 that's why a lot of times you are getting the
10 same answer out as Mark sort of alluded to, that
11 we're getting the cases that should be allowed,
12 probably allowed, then the cases not allowed that
13 probably shouldn't be.

14 And, I think the technical effect is
15 a kind of another way to get at abstractness.

16 MR. BERNSTEIN: Those are actually
17 words that a number of my European clients have
18 seized on right out of the Alice case where
19 there's a reference to technical effect. And,
20 the first reaction I got was, oh, you all are
21 more like us now because they've been looking at
22 it that way for a really long time and I think

1 it's a helpful construct.

2 MR. KELLEY: Thank you.

3 And, I don't want to forget about Mr.
4 Thomas back in our headquarters office. And, I
5 want to give you, sir, the opportunity to respond
6 to any of the questions if you'd like to.

7 MR. THOMAS: Yes, thank you.

8 I think it's imperative to understand
9 that the difference between Bilski and Alice, it
10 was a quantum leap of illogic. It supplied the
11 definition of an abstract idea with no physical
12 or concrete existence to a whole arena,
13 unfortunately, of electronic commerce, computer
14 networking, et cetera, et cetera, business
15 methods.

16 It's, I mean, as shown in one of the
17 slides that our Unit 3600 is a huge aberration.
18 Congress has not dictated. There is no precedent
19 for this. I think the Patent Office needs to
20 look extremely closely at what's going on in TC
21 3600 and 705 patents because of the impact, the
22 Internet and international digital trade, the

1 importance of those areas to our economy.

2 MR. KELLEY: Okay, thank you very
3 much, Mr. Thomas.

4 And, I want to thank the whole panel
5 for their time here this morning.

6 MR. THOMAS: Thank you.

7 MR. KELLEY: And, also urge anybody
8 who hasn't yet submitted written comments to do
9 so by January 18th.

10 Thank you and we'll trade out now for
11 the second panel.

12 Okay. So, we'll begin our second
13 panel and the first speaker on our second panel
14 is from the United States Patent Trademark
15 Offices Denver Regional Office, Mr. Chirag Patel.

16 Mr. Patel?

17 MR. PATEL: Can you hear me all right?

18 MR. KELLEY: Yes, sir.

19 MR. PATEL: Great, okay, well, thank
20 you very much for including me in the panel.

21 I'm a patent prosecutor based in
22 Denver and here participating on this beautiful

1 Rocky Mountain office here right now.

2 So, you know, we talked a lot about
3 how the case law and common law is advancing in
4 this issue of software patent eligibility and 101
5 issues and purpose.

6 We've already mentioned about how, you
7 know, the resolution will come from the course
8 and the legal analysis.

9 And, so, I wanted to kind discuss
10 about this recent case that came out in October
11 of this year actually from the Court of Appeals.

12 And, it does shed some light on
13 clarifying the issues about the eligibility of
14 the software, patent claims.

15 This is a case that came from the
16 Eastern District of Virginia and it's Amdocs is
17 the patenting, they have four patents. They're
18 all rooted generally towards accounting and
19 billing systems for network providers.

20 So, they talk about how to account for
21 network traffic that in a distributed network.
22 You know, you have transactions going all over

1 the network and how they are manage this large
2 amount of data that somehow needs to be
3 processed.

4 So, the case was made that this is a
5 technical problem and the solution that the
6 claims have is a technical solution.

7 So, Openet is the defendant that
8 pleaded invalidity for all of the four patents,
9 all the claims and then the majority opinion by
10 Judges --

11 I'm sorry, I'm on the first slide, if
12 you don't mind, second slide, I'm sorry, if you
13 don't mind moving to it. There we go, okay. It
14 lists more detail about what I'm talking about.

15 So, Judges Plager and Newman upheld
16 the claim, says, eligible and they used all of
17 the recent cases. They talked about -- some of
18 this came out for eligibility, some not. They
19 kind of drew a lot of commonalities between the
20 DDR and the Bascom claims and analysis.

21 Next slide, please?

22 So, there are four patents that are at

1 issue here and I'm just going to talk about a
2 couple of claims and a couple of this patents.
3 They all are generally similar to each other and
4 in terms of the -- what they cover.

5 So, as I said earlier, this is
6 software technology for accounting and billing
7 for network traffic. And, the claim was made
8 that, you know, we're receiving accounting
9 records from very widespread locations, so they
10 said, first, network accounting records from a
11 first source and the second from the second
12 source and then the computer code is of how
13 managing to enhance the first network accounting
14 record using all the data that is collected from
15 all the different locations.

16 And, so, if you read it at the high
17 level, it's a, you know, pretty short claim.
18 It's a pretty, I would think, I would consider
19 broad claim. And, a lot of the petitions in
20 here, you would think that, well, probably an
21 examiner is going to come up and say, well, all
22 you're doing is receiving a record, you're

1 collating it and then you are using some
2 accounting information to change one accounting
3 records.

4 So, you know, you have all seen a lot
5 of rejections that would be in 101 that would
6 say, no, this is not eligible.

7 But, the court found this case to be
8 one eligible. They cannot focus on the
9 limitations, the third limitation about enhancing
10 the first network accounting record.

11 They went back, actually, for the 101
12 analysis to the specification and construed the
13 claim. And, say that, the enhancement as applied
14 to a number of a field enhancements in a
15 distributed fashion.

16 Well, is it, does it help really? I
17 don't know. But, that's where the analysis went.
18 And, then, they said the distribution processing
19 is a critical advancement over the prior. So,
20 they considered this as unconventional
21 technological solution to a technological
22 problem.

1 They did talk about in the analysis
2 how, you know, this massive amount of data that
3 needs to be processed and this claim or this
4 solution allows you to do that.

5 So, next slide, please?

6 And, I have some observations about
7 like, so, if this is the case that the case the
8 court considers to be patent-eligible, well, you
9 know, massive data processing is pretty common.
10 Any time there's massive data processing can we
11 come up with some language that could help us to
12 couch that as a technological solution? Maybe.

13 You know, as I said before, the law of
14 the court is that of commonalities of the claimed
15 terms that the DDR holding in Bascom.

16 So, you know, as to a practitioner, I
17 would say, you know, look at the claims in those
18 two cases that were held eligible and cannot be -
19 - if you can come up with some commonalities in
20 what you're doing in your claims, that might help
21 you in furthering your arguments.

22 Next slide, please?

1 So, let's talk briefly about the other
2 -- one other claim. This is a pretty detailed
3 claim for the -- one of the other patents.

4 And, then, if you look at the -- all
5 the limitations, it's collecting, it's filtering,
6 it's storing, it's up in queries, it's
7 outputting. And, you know, all these terms are
8 normally would be considered nothing
9 significantly more, not adding anything more
10 significantly by a lot of the examiners under the
11 current guidelines.

12 And, I'm getting, you know, the court
13 went back, in this case also, the court went back
14 and did a specification and construed the terms.

15 Next slide, please?

16 So, the court kind of focused on the
17 third limitation which talked about computer code
18 for completing plurality of data records. And,
19 they went back and said completing is directed
20 towards enhancing a record until all of required
21 fields that we populated.

22 And, then, went back to the arguments

1 about the -- why enhancing was something that was
2 not going to amount to a technological solution.

3 Though, there was not a claim
4 construction that was done in this case, even at
5 the 101 analysis, which is usually, you know,
6 about one would think that it's not usually done
7 that often.

8 But, a couple of things here that I
9 would point out is that, you know, distributor
10 architecture, the court said there's an issue
11 with architecture and official to minimize impact
12 on network system resources is something that is
13 technological solution here.

14 So, you know, a lot of claims that we
15 draft for a lot of clients deal with, in some
16 ways, minimizing some impact on some part of the
17 system resource. So, can you use that in
18 arguments to say this is patent-eligible subject
19 matter because of those arguments by the case?
20 That could be useful in the future.

21 Next slide, please?

22 So, I wanted to kind of close this out

1 with a few high level observations and takeaways.

2 You know, there was a lot of
3 discussion about how is the 101 analysis binary
4 or not. And, it looks like the court here kind
5 of tried to use a flexible approach by
6 emphasizing that, sorry, about the track over
7 there, but the abstract guide, it has no set
8 meanings.

9 So, there's no set meaning anywhere,
10 so the definition of abstract idea and they
11 relied on the claim construction beyond what's
12 the claim leveled in the claims and on
13 improvements over the prior art which is
14 discussed a lot in the specifications.

15 And, the last slide, please?

16 So, one final observation here is also
17 that, you know, again, the analysis was not
18 binary. If you are a practitioner, emphasize an
19 improvement provided by the solutions.

20 You know, if you can discuss more of
21 those improvements in the specification, you can
22 use that later on in making your argument that

1 your claims were patent-eligible because of their
2 technological solution or nonconventional service
3 in technological problems.

4 There was a dissent by Judge Reyna
5 that is pretty interesting and long, if somebody
6 is interested in reading it.

7 But, I think with that, I'm going to
8 close. Thank you very much.

9 MR. KELLEY: Thank you, Mr. Patel.

10 And, our next speaker is here at
11 Stanford, Dorothy Auth.

12 Dr. Auth?

13 MS. AUTH: Good morning.

14 My name is Dorothy Auth. I'm here
15 representing the New York Intellectual Property
16 Law Association. I'm the Immediate Past
17 President.

18 We assembled an ad hoc committee in
19 order to prepare for this presentation and think
20 about what the best guidance would be for the
21 USPTO on the question of the larger question of
22 101 and what might need to be done to correct the

1 place we are right now.

2 The NYIPLA's view is that the Section
3 101 bar should really be a low bar. It should be
4 a sieve with very large holes.

5 It should hold back ineligible subject
6 matter if that it contains patent claims that are
7 directed to a law of nature, abstract idea or
8 natural phenomena, but it should allow claims to
9 proceed through the further analysis of 101, 103
10 -- 102, 103 and 112 if there are particular
11 applications of the abstract idea, law of nature,
12 natural phenomena.

13 The question really is, how can we
14 distinguish between ineligible subject matter and
15 eligible subject matter?

16 And, the Supreme Court's opinions in
17 this two-part test articulated by Mayo, Myriad
18 and Alice have proven to be very problematic and
19 they don't provide a simple framework to know
20 what the right level of abstraction is for
21 Section 101 analysis.

22 Recently, the Federal Circuit is

1 helping to answer question number two of the two-
2 parts test through its analysis of patent-
3 eligible subject matter in, for example, the two
4 recent decisions in McRO and Rapid Litigation
5 Management.

6 In these cases, the Federal Circuit
7 has identified patent-eligible subject matter in
8 both, well, one of each in computer related
9 sciences as well as life science, both of which
10 are profoundly affected by the Supreme Court's
11 decisions recently.

12 And, they focused on the very simple
13 concept of technological improvements in the
14 claim language.

15 And, secondly, they also required that
16 the language of the claim, by virtue of this
17 technological improvement, be described in the
18 specification.

19 And, that it not preempt the law of
20 nature because the claims are narrowly tailored
21 applications of the natural law or abstract idea.

22 And, they're supported in the

1 specification.

2 The common theme is that the
3 specification must explain the technological
4 features, the particular application that
5 specifically recites the claims. And, thus,
6 ensures that the claims don't preempt the law of
7 nature, abstract idea or natural phenomenon.

8 In the NYIPLA's view, the Section 101
9 analysis should be considered whether or not the
10 claims include specific steps or elements which
11 render the claimed invention.

12 It should be based upon the definition
13 of what an invention is. And that really goes
14 back to the definition in our statute, it needs
15 to be a useful process, a machine, manufacturer,
16 a composition of matter or an improvement
17 thereof.

18 In particular, the process definition
19 in Section 100(b) even points out that it can be
20 a process, art, method and includes a new use of
21 a known process, machine, manufacturer,
22 composition of matter or material.

1 The NYIPLA believes that, although,
2 the Federal Circuit is moving in the correct
3 direction by focusing on specific recited
4 features in the claims and support in the
5 specification as well as its requirement that the
6 claimed invention not preempt the law of nature,
7 ultimately statutory amendment will likely be
8 needed to finally resolve the matter because we
9 have sort of this push-pull that we've already
10 mentioned between the Federal Circuit and the
11 Supreme Court.

12 And, as between the two, as Professor
13 mentioned before, the Supreme Court usually wins.

14 So, the NYIPLA would proposed that, at
15 the end of Section 101, a sentence be added that
16 would say, a claim complying with this section
17 may recite a practical application of a law of
18 nature, abstract idea or a natural phenomena, but
19 may not claim or preempt a law of nature,
20 abstract idea or natural phenomenon.

21 Such an amendment would clarify the
22 applicable standard for review.

1 Such an amendment would lessen the
2 burden both on the courts as well as in the USPTO
3 which currently are expending tremendous
4 resources in trying to understand what standards
5 should be applied in the fact of a test it and
6 see and compare it to the other cases that have
7 been decided previously standard.

8 You know, our goal is to create a
9 Section 101 that focuses on patentable inventions
10 that clearly defines what falls within the
11 patent-eligible subject matter and what is
12 outside that.

13 And, also, as we feel is happening
14 already with the Federal Circuit, to a certain
15 extent, and shift the true analysis back to 102,
16 103 and 112.

17 Thank you.

18 MR. KELLEY: Thank you very much.

19 And, our next speaker this morning
20 will be Steve Chiang.

21 MR. CHIANG: Hello and thank you for
22 the opportunity to add to the public discourse on

1 subject matter eligibility.

2 May name is Steve Chiang and I
3 currently serve as a Director and In-House IP
4 Counsel at RPX Corporation.

5 However, I am here today speaking not
6 on behalf of RPX but as an individual spectator
7 of and participant in the patent ecosystem.

8 I'll spend the next few minutes
9 focusing on the question of whether developments
10 in patent eligibility law should be left
11 primarily to the courts or whether additional
12 administrative initiatives are desirable.

13 Any participant in the patent
14 ecosystem is likely familiar with the individual
15 roles played by the USPTO and the courts as well
16 as the impact that the Supreme Court's Alice
17 decision has had on their businesses.

18 Indeed, particularly for those dealing
19 with software and business method patents, the
20 decision and it's progeny have shifted litigation
21 outcomes and strategies wholesale, devalued
22 entire patent portfolios while arguably

1 increasing the values of those less susceptible
2 to invalidation under post-Alice Section 101,
3 drastically lowered allowance rates in some tech
4 centers and art units and impacted an unknowable
5 number of key business decisions for many a small
6 business such as should I seek a patent
7 protection for my idea?

8 However, these are not isolated
9 effects because the participants, whether
10 litigants, licensors, licensees, applicants and
11 would-be applicants are often one in the same.

12 And, these respective businesses could
13 stand to benefit greatly from consistency in the
14 patent ecosystem as a whole.

15 Although both the Article III core
16 system and the USPTO played critical roles in
17 evolving the practical ramifications of
18 developments and patent eligibility law, these
19 roles have traditionally been separate.

20 Thus, if we accept the assumption that
21 consistency in the patent ecosystem is more
22 desirable, perhaps developments in patent

1 eligibility law should be a joint effort.

2 One potential way to increase
3 consistency is by enlarging the boundaries of the
4 deference attributed to the examination process
5 by district courts and their determinations of
6 eligibility.

7 For example, if district courts were
8 to consistently apply the Section 282 presumption
9 of validity to determinations under Section 101,
10 that could potentially prevent many situations in
11 which applicants invest a significant amount of
12 money into prosecuting an application to issuance
13 by overcoming Section 101 rejections only to have
14 the patent invalidated, for example, in the
15 pleading stage.

16 Since Alice and through end of Q3 this
17 year, in only 20 percent of distinct cases
18 rendering a judgment under Section 101 did
19 district court Judges even mention the
20 presumption of validity under Section 282.

21 Those cases were largely split with
22 anti-presumption Judges generally following

1 Mayer's concurrence in Ultramercial III and the
2 lack of a specific application of Section 282 to
3 Section 101 determinations in recent Supreme
4 Court patent eligibility jurisprudence including
5 Alice.

6 And pro-presumption Judges generally
7 tracking to Supreme Court's broader endorsement
8 of the presumption of validity in Microsoft v.
9 i4i and its progeny.

10 However, in the other 80 percent of
11 cases one can only assume that the lack of
12 discussion of Section 282 intimates a lack of
13 application of Section 282.

14 This is difficult to reconcile with
15 the fact that the examining court, with its
16 technical expertise is well equipped to explore
17 the second step of the Alice-Mayo framework since
18 whether abstract ideas are integrated into
19 something significantly more should really be
20 relative to one of ordinary skill in the art.

21 However, of the 20-plus litigated
22 patents that issued after Alice and, to be fair,

1 after the 2014 preliminary examination
2 instructions and IEG published, only three of
3 those received Alice-based rejections on the
4 merits during examination.

5 Consistently ensuring a more fully
6 developed examination record, especially with
7 respect to Section 101 is a good step toward
8 working with the judiciary to explore the
9 possibility of consistently applying Section 282
10 across all determinations of validity including
11 eligibility.

12 Another potential avenue for
13 increasing consistency in patent eligibility
14 determinations is by revisiting amendment
15 practice at the PTAB which is both the most
16 popular alternative form to district courts for
17 litigating patents and the single largest source
18 of appeals to the Federal Circuit in 2016.

19 It is difficult to reconcile why an
20 underpinning rationale militating against the
21 application of Section 282 at the PTAB that is,
22 the patent owner having the ability to amend

1 claims has not been more liberally applied in the
2 context of Section 101.

3 In particular, movants filing motions
4 to amend in CBM reviews and post-grant reviews
5 face long odds in having to meet shifted burdens
6 to distinguish not only prior art of record -- to
7 distinguish prior art of record, but it's as yet
8 unclear whether one, for example, a petition for
9 CMBR or PGR is instituted only on Section 101
10 grounds, motions to amend might become easier.

11 For example, by allowing movants to
12 add more details from the disclosure regarding
13 the implementation of claim elements that, upon
14 institution of trial, were deemed by the Board to
15 be preemptive, functionally claimed and flat out
16 abstract.

17 Allowing such amendments are largely
18 within the discretion of the PTAB subject, of
19 course, to the Federal Circuit's holdings in
20 Microsoft v. Proxyconn and Nike v. Adidas and
21 squares with not applying a resumption of
22 validity and post-grant proceedings under the

1 AIA.

2 Further, an increase in the number of
3 motions to amend under Section 101 together with
4 their oppositions to amend could similarly help
5 to ensure a more fully developed record.

6 I would like to thank the USPTO for
7 inviting public input on a piece of patent
8 ecosystem that has likely affected every person
9 in here in some way.

10 And, I'd also like to thank the RPX
11 research team, including Jake Wexler for support
12 in this.

13 Thank you.

14 MR. KELLEY: Thank you, Mr. Chiang and
15 thank you for being able to work in motions to
16 amend even to a 101 roundtable. I've got them on
17 my mind.

18 So, next, we'll move to Kevin Noonan.

19 Dr. Noonan?

20 MR. NOONAN: Thanks very much.

21 Thanks to the Patent Office for
22 inviting me and for all of you for being here.

1 Good morning, I'm Kevin Noonan. I'm
2 a partner at McDonnell, Boehnen, Hulbert and
3 Berghoff which is a mouth full, so we usually say
4 MBHB. And, also one of the authors in the patent
5 docs blog, if you're kind enough to read that
6 every day. I hope you are.

7 So, I'd like to talk today about my
8 views on the role of the office and interpreting
9 and implementing the recent Supreme Court
10 decisions, as we all do, concerning subject
11 matter eligibility.

12 But, I want to do this in the context
13 of separation of powers between what the
14 Executive Branch is supposed to do and what the
15 Judicial Branch is supposed to do.

16 And, I think it would be a mistake to
17 believe, as, unfortunately, the Federal Circuit
18 seems to, that the Court has spoken definitively
19 about subject matter eligibility.

20 I think that the Court would agree,
21 and if you remember during the oral argument in
22 Alice, Justice Breyer said the Court didn't

1 intend for the Mayo decision to be the end of the
2 development of subject matter eligibility law.

3 He said that, rather the Court and the
4 principles in Mayo were just meant to sketch the
5 outer shell of the content of what the law should
6 be, suggesting that even the Mayo decision's
7 author didn't think that he was or intend to
8 speak definitively or exclusively or finally on
9 the issue.

10 So, I think that we think about it,
11 that's the proper role for the Court. If you
12 remember, Chief Justice Roberts said in the
13 Obamacare decision, National Federation of
14 Independent Business v. Sibelius, the following,
15 I'm going to quote him.

16 He says, our permissive reading of
17 these powers is explained, in part, by a general
18 reticence to invalidate the acts of the nation's
19 elected leaders.

20 Members of this Court are vested with
21 the authority to interpret the law. We possess
22 neither the expertise or the prerogative to make

1 policy judgments. Those decisions are entrusted
2 to our nation's elected leaders who can be thrown
3 out of office if the people disagree with them.

4 I also think that if you look at the
5 cases, the other cases in patent eligibility, the
6 Courts try to be parsimonious in its decisions.

7 Myriad, for example, Justice Thomas
8 said, and I'll quote him again, we merely hold
9 that genes and the information that they encode
10 are not patent-eligible under Section 101 simply
11 because they've been isolated from the
12 surrounding genetic material.

13 And, if you look carefully at the
14 decisions in *Bilski* and in *Bowman* and several
15 others, you will see that the Court has tried
16 very hard not to make blanket and broad
17 statements.

18 I think that the Court understands
19 that it sees patent cases only sporadically,
20 although I understand how, these days, it doesn't
21 seem that way. And, usually, the cases are
22 brought to test the limit of the statutory

1 section and to try to probe the law a little.

2 But, they're hardly representative
3 cases and they're hardly representative claims.

4 The office, on the other hand, sees
5 all the cases, good and the bad, the eligible and
6 the not eligible, the patentable and the non-
7 patentable. And Congress has given the office
8 the authority to sort out what is patentable from
9 what is not.

10 So, that experience, in addition to
11 the expertise, both technical and legal that the
12 office has, is why the Court can defer and maybe
13 should under Chevron when the Agency applies that
14 expertise and making decisions on patent
15 eligibility.

16 The proper role of the Agency is to
17 use its expertise and provide the Court with the
18 concrete examples of how the law is applied to
19 each new invention based on its interpretation
20 for the Court then to determine whether it's
21 doing the right thing.

22 I think that it's a mistake for the

1 office to act, and I think it did, and I don't
2 understand why they did, but they did a news
3 release that the Court has tied its hands or
4 somehow mandated an outcome.

5 One of the blessings of the fact that
6 the Court has a rather inconsistent focus on
7 patent law and also its unwillingness to overrule
8 its earlier case law is that it makes it possible
9 to distinguish cases that should be patented from
10 the consequences of some of these decisions.

11 I'll give you an example. One
12 reaction to Myriad was to call generally the
13 whole idea of natural products patenting into
14 questions. The consequence of this, if carried
15 through its extreme what I think, honestly, would
16 be devastating.

17 A recent study by the National
18 Institute of Health about 1,400 small molecules
19 that were approved by the FDA between 1981 and
20 2010 show that about 75 percent of the
21 antibacterial drugs and 80 percent of the
22 anticancer drugs were natural products or

1 derivatives of natural products and they would
2 have been unpatentable under a very stringent
3 application of the Myriad test.

4 But, the Supreme Court giveth and the
5 Supreme Court taketh away.

6 The Chakrabarty decision provides an
7 easy basis to avoid the outcome. In Chakrabarty,
8 the Court said the standard for patent
9 eligibility was that an invention be a product of
10 the human ingenuity, having a distinctive name
11 character in use.

12 The office could rely on that decision
13 to consider a chemical or other product found to
14 be derived from nature to be patent-eligible
15 provided that the composition was changed from
16 its natural state, in structure, function,
17 purity, use, consistent with Chakrabarty.

18 And, I'll mentioned that there's a
19 section of the oral argument in Myriad in which
20 Justice Alito probes Chris Hansen from the ACLU
21 about whether somebody had actually found a new
22 plant in a jungle that had a component that could

1 be made into a drug.

2 And, even Chris Hansen, even the ACLU
3 said, oh, no, that would certainly be patent-
4 eligible. That's not what we're talking about.

5 And, also, remember that in Myriad --
6 after Myriad, Chakrabarty was not only cited
7 there, but was cited with approval. So, I think
8 it's good law.

9 As for the diagnostic method claims,
10 arguably, are the bigger problem in patent
11 eligibility for life sciences.

12 Remember, that each and every step of
13 the claim in Mayo was routine, conventional and
14 well understood because it had actually been
15 practiced in the prior art. There was nothing
16 new about -- in that claim except a recognition
17 of the boundaries as to what was and was not
18 effective.

19 So, good law exists and people have
20 talked about Diehr already, that mandates the
21 office to look at the claim as a whole. And, if
22 you avoid the piecemeal application of the Alice

1 test one after the other, I think you get to
2 that.

3 Now, if you look at the guide, it says
4 the office has come out with most recently, I
5 think that this has shown a tendency to not
6 slavishly follow what is believed that the Court
7 said, but rather, to interpret and distinguish.

8 But, I think that, you know, if you
9 are to understand Mayo the way it's being applied
10 at least by the district courts, almost all
11 diagnostic method claims are patent-ineligible.
12 But, that doesn't have to be the case.

13 Sequenom is the example. And, I
14 understand the Federal Circuit didn't support the
15 patenting of Sequenom, but I'm not too worried
16 about that because there were actually factual
17 distinctions that could be made.

18 The office has experience in telling
19 the Federal Circuit when they think they're
20 wrong.

21 I'll remind you of In re Bell and In
22 re Deuel in which the facts of the second case

1 reviews in the face of the first one to continue
2 to say that gene patenting would be obvious.

3 And, the current spate of Superior
4 Court reversals of the Federal Circuit shouldn't
5 make the office shy for telling the Federal
6 Circuit when it thinks that they're wrong.

7 The fact that the Supreme Court did
8 not grant cert in the Sequenom decision, I think,
9 shouldn't be taken as a belief that, in fact, the
10 Patent Office got it right. I think that the
11 Court seems to be very happy as in the poser case
12 to think the Patent Office is actually getting it
13 right.

14 I also think that, if we don't give
15 the -- provide the grist for the mill, if we
16 don't provide patents that can be challenged,
17 even on eligibility grounds, the Court, if it
18 really intends to be just doing the contours, is
19 not going to get the opportunity that it needs to
20 decide, in fact, where those contours should be.

21 And, so, I don't think that it's
22 reversal from below to say that when the office

1 applies this expertise to these matters of which
2 it has expertise, that they may come to a
3 different decision that courts may have in other
4 cases.

5 But, every case has its own facts.
6 And, the application of the law as the Patent
7 Office understands those facts give the office
8 the opportunity to contribute in determining what
9 should and shouldn't be patent-eligible.

10 And I'll end my comments there.

11 MR. KELLEY: All right, thank you very
12 much.

13 And, our final speaker this morning on
14 our first panel -- I'm sorry, second panel, is
15 James Reed.

16 Mr. Reed?

17 MR. REED: Thank you very much.

18 I want to start by just thanking the
19 Patent Office for this invitation to speak here
20 and contribute to this very interesting
21 discussion.

22 I'm a patent counsel at the law firm,

1 Squire, Patton, Boggs. I draft patent
2 applications. I prosecute patent applications.
3 That's primarily my area in this field.

4 Before I say anything, let me state
5 that my views here are just my own. I don't
6 speak for the law firm, Squire, Patton, Boggs.
7 I'm just an interested participant and want to
8 just share in this discussion of this subject
9 matter.

10 In the last panel, I heard and I
11 wanted to -- didn't plan on opening with this,
12 but the idea was, I believe it was, is it a
13 binary question, abstract or not?

14 It seems to me that, in the Alice
15 opinion, the Court says quite clearly, every
16 patent claim is directed to an abstract idea at
17 some level.

18 So, and we also know from that case
19 that the exclusionary principle, that is the
20 abstract idea exception in the other areas that
21 are considered excluded subject matter for patent
22 eligibility, the concern came from a concern over

1 preemption.

2 Is the patent claim essentially
3 claiming what the Supreme Court said were the
4 basic tools of research and development or was
5 there something more to it than that? Is there
6 actually an improvement being claimed? And, is
7 there a contribution to the art?

8 The whole patent system is based on
9 the idea that you grant a patent to promote the
10 sciences in exchange for disclosing your
11 invention. That is an improvement in the
12 technology.

13 We will grant you a limited monopoly
14 on those rights.

15 Turning now to Federal Circuit cases,
16 I want to focus on the triad of cases Enfish,
17 McRO and Amdocs that came out this year.

18 It had been two years since Alice was
19 decided that we really didn't have any idea what
20 needs to be in a patent claim subject to the
21 Alice-Mayo test that will make it patent-eligible
22 as not directed to an abstract idea.

1 We first got a clue of what type of
2 claim that could be in the Enfish decision. The
3 Court looked at the claim, and as we know, and as
4 prior speakers have mentioned, that step one is a
5 meaningful part of the Alice-Mayo test.

6 The limitations in claims are
7 meaningful and when you undertake part one of the
8 Alice test, you have to take that into
9 consideration before just deciding whether it's
10 an abstract idea or not.

11 In the Enfish case, the non-abstract
12 idea was an improvement in computer
13 functionality. How did the Court arrive at that
14 decision?

15 I think this was an interesting
16 decision from the perspective that, as we all
17 seek to understand when will we have a definitive
18 test that won't be so dependent on the technology
19 field implicated by the claim?

20 That's essentially what we're after
21 here. Right? We don't want a test that is so
22 dependent on the technology field, the

1 descriptive nature of a claim, to decide future
2 cases, the common law approach.

3 The Court looked at the claims and it
4 read a patent. And, as we know, the Federal
5 Circuit, they look at claims and then they
6 confirm their understanding of a claim through
7 the specification, struck me as helpful and, I
8 believe, insightful in light of the Supreme Court
9 precedent that the English court saw that the
10 patent was really had a narrow focus.

11 The limiting aspect of the claims, as
12 we know, was this self-referential table or
13 database, I forget exact words, that was the
14 patent he sought was the solution to the drawback
15 in the prior art with was the relational
16 database. They're inefficient storing and
17 reading data and this was the patent he believed
18 that is self-referential database would solve
19 those problems in the prior art, the technology
20 prior art.

21 It's talking about an improvement over
22 technology. The specification makes that clear,

1 its differential table is one in the -- viewed as
2 one in the same as the invention.

3 At the conclusion of the Enfish case,
4 the Court says, this is clearly not ineligible.
5 This is not an abstract idea, disparaging marks
6 in the prior art, the improvement over the prior
7 art that it makes very clear in the specification
8 is enough for us. This is not an attempt to
9 deceive one by the draftsman art.

10 McRO case came out four months later.
11 I think along similar lines. The McRO case said,
12 you cannot simplify claims in step one. They are
13 meaningful claims, citing Enfish.

14 In the McRO case, the Court took it a
15 step further towards this kind of goal of
16 arriving at a test which would make the
17 examination procedure much more tractable and
18 implementable for examiners, not making it
19 dependent on a technology field.

20 The McRO case looked at it and said,
21 the specification seeks to solve a problem. The
22 prior art has this problem, tedious, time

1 consuming step that requires a person, a human
2 being, to decide, in the case it was allegedly
3 admitted that it was a subjective process and it
4 solves a big problem here.

5 You take a subjective process, you
6 replace it by rules that allegedly obviate the
7 need for a person to do this step and you arrive
8 at a much more simpler process.

9 This is the solution. This is a
10 technological solution. And, so, the Court then
11 arrives at the same, essentially, the same
12 conclusion, in my opinion, which is this is a
13 problem and a solution. This is a technology
14 problem, there is a technology obstacle that's
15 keeping you from arriving at the right result and
16 the claim is limited to that solution, to the
17 technology problem.

18 And, that case also, we know that,
19 there was arguments for how the claims were
20 preempting the prior art. In other words, you
21 have a human being that's performing these roles
22 and the roles that the patent he arrived at,

1 well, that would have been the same types of
2 rules that anyone would have arrived at.

3 That was not proven. There was
4 insufficient proof to prove something like that.
5 I think it would be extremely difficult to prove
6 something like that in the ordinary course. And,
7 setting aside the implications of what they may
8 mean in the context of a motion to dismiss, I
9 think it's more interesting to look at that case
10 and say, look at how the Court tried to describe,
11 well, the preemption, the preemption concern.

12 This is significant and what is the
13 preemption about? Preemption is about claiming a
14 method for solving a problem as opposed to just
15 stating the result. And, claims that preempt
16 only state the result.

17 And, I think that's the more workable
18 way of approaching this.

19 Of course, in Amdocs, we found out
20 that the Federal Circuit is not in total
21 agreement on that. They're still looking at
22 cases. But, I think if you look at the Amdocs

1 case, when they select their case that's most
2 similar and reach a decision, they go back to the
3 same test that McRO is suggesting.

4 Thank you very much.

5 MR. KELLEY: All right, thank you very
6 much, Mr. Reed.

7 My first question is directed, first,
8 to you, Dr. Auth, and I thought I heard you say
9 something along the lines of a technological test
10 or a technological requirement.

11 And, so, my question is related to
12 Mayo, which I'm glad people raised this morning.
13 Because, I think that Mayo struck people as odd
14 when it came out because it was the first case
15 that I think many of us had seen in a long time
16 where the Court focused on what I'll call the
17 marginal inventiveness of the claim.

18 And, I don't mean that pejoratively,
19 but the difference between what was claimed and
20 what existed in the prior art.

21 And, so, my question is, if we move to
22 something like a technological requirement, is it

1 fair to follow a case like Mayo and look only to
2 the marginal change in the claim? Is that where
3 the technological advancement has to be? Or, is
4 it, as on the claim as a whole?

5 MS. AUTH: Well, it should certainly
6 be looking at the claim as a whole. But, the
7 term I was using was technical improvements.
8 And, that was based upon what we've seen in McRO
9 and Rapid Litigation.

10 And, there, they're basically looking
11 for some specific or cited language in the claims
12 that is a particular application of the law of
13 nature.

14 And, so, you use the technical
15 improvements or -- yes, that's the language they
16 use -- and, it's very similar to what others were
17 saying about the language that Europeans use of
18 technical effect.

19 And, so, it's a very low bar and it
20 really is just saying that you're claiming
21 something that's described in the specification
22 and is particularly something that is an

1 application of a law of nature rather than trying
2 to claim the result itself and the law
3 altogether.

4 So, using the concept of an
5 application of knowledge as a way to sort of
6 bookend what it is you're allowed to claim and
7 the concept of preventing preemption, you have --
8 we hope that you can find a middle ground for
9 what should be patent-eligible in between.

10 MR. KELLEY: Okay. Yes, Shira?

11 MS. PERLMUTTER: This is also for Ms.
12 Auth.

13 So, I'm interested in your suggestion
14 about a sentence that would be added to Section
15 101. Could you describe a little bit more what
16 the interplay would be, the intended interplay
17 between that and judicial exceptions, the extent
18 to which they would -- that would substitute for
19 existing judicial exceptions or preclude future
20 ones being developed?

21 MS. AUTH: You know, I think that our
22 proposed language is really not to -- well, it

1 uses the current judicial exceptions, the law of
2 nature, natural phenomenon, abstract idea and
3 basically is trying to define in some more useful
4 manner, rather than just saying it cannot be
5 those things, and say something in a positive
6 way.

7 One of the earlier presenters said,
8 look, the problem with the current test is it's a
9 negative test.

10 And, so, you know, what it can't be,
11 but how do you figure out what it can be?

12 And, so, the language that NYIPLA is
13 proposing actually comes from the Supreme Court's
14 decision in Myriad and was actually relied upon
15 in Rapid Litigation, this concept of the
16 application of knowledge or a law of nature.

17 So, you're -- it's a low level way of
18 saying this is a use of this law of nature rather
19 than the actual law of nature itself.

20 MR. KELLEY: So, we had a question
21 online that I'll sort of paraphrase which is,
22 does anybody on the panel think that in making

1 these decisions and given that we're sort of
2 dealing with the stately evolution of common law
3 that the USPTO should forge a path based on what
4 it should do in the gray areas?

5 And, what I mean is, should it lean
6 towards patentability or not patentability if it
7 can't figure it out?

8 And, I have no personal view on that
9 at all, speaking from the Agency. It's just
10 something I've heard brought up on the outside
11 and there's two ways to look at it.

12 One way is if we grant a patent that
13 perhaps we shouldn't have granted, it can't get
14 tested until it goes into litigation.

15 The other way to look at it is if we
16 reject a claim that arguable we should be
17 issuing, that can get to the courts much quicker
18 because it can get to the courts through a direct
19 path from that rejection.

20 And, I'm just wondering if anybody on
21 the panel has thoughts on that?

22 MR. NOONAN: You know, paradoxically,

1 the post-grant review and inter-parties review
2 and all of that which people complain about all
3 the time short circuits that problem.

4 I mean, I would say that, given the
5 importance of patents, especially to small
6 companies, that erring on the side of when you
7 get to a gray area, granting a patent with, you
8 know, sufficiently narrow claims, I mean, I think
9 that the ideas in the gray area, the grayer the
10 area, the less broad the claims can be because
11 it's harder to get over 112 and 103 issues in
12 that instance.

13 But, claims of the proper scope, if
14 there is a gray area, then they can be challenged
15 within nine months with PGR. And, that allows
16 you to bring Section 101 issues. And, under IPR,
17 under 103.

18 So, I realize Justice Kagan thinks you
19 guys are patent happy. I think that's a good
20 thing. But, I think you'd -- I would rather see
21 the office err in those really close cases on the
22 side of patentability than the other way around.

1 MS. AUTH: I would tend to agree that
2 the Patent Office should really be focused more
3 on the other substantive areas and that 101
4 should really be, as I said, a low bar.

5 And, so long as -- and a way that the
6 Patent Office can move forward with this is to
7 really be very particular about the technical
8 applications of a law of nature that they can
9 find within the claim.

10 And to be constantly focused on, is
11 there something specific about this particular
12 invention that's in the claim rather than just a
13 general concept that's in the claim?

14 And, so, specificity, I think, is the
15 answer. And, of course, focusing on the other
16 substantive parts of the statute.

17 MR. REED: I think that moving towards
18 the gray area being patentable is perhaps the way
19 to go. But, I think really have to be cautious
20 about things.

21 It's a common law situation, common
22 law case decision situation we have right now.

1 Let's not forget that, over the past year, we
2 really have made some strides in trying to
3 understand this test.

4 A year ago, we had no clue about what
5 step one was about and how you went about doing
6 the test. If you look at how the district courts
7 were deciding what the standing law was, it
8 really was very little substance.

9 And, I think there's a lot more now.
10 We have to give it time. You know, after a 100
11 cases are decided by the Federal Circuit, will
12 they then come together?

13 It's clear right now there's a big
14 division between the Justices and, of course, the
15 big fear here is we don't want to arrive at a
16 rule that can be evaded. We comply with the
17 rule, but not with the spirit of the rule and
18 that is avoiding patenting abstract ideas.

19 We have to keep that in mind and I
20 think you need to give it more time before we can
21 really arrive at some way of looking at it in a
22 systematic format.

1 MR. CHIANG: I think just to echo some
2 of those comments, I mean, maybe in that gray
3 area, maybe a hybrid approach is perhaps the best
4 approach.

5 Because, you know, if you have
6 examiners who are issuing rejections under
7 Section 101, at least what's happening is there
8 is an abstract idea that's being articulated and
9 the applicant is forced to say, you know, either
10 why it's not an abstract idea or what the claim
11 adds that's significantly more.

12 That additional clarity can only help
13 later prosecution and later litigation as well.

14 So, you know, I think maybe the answer
15 is to push a little bit, but not to put your foot
16 down.

17 MR. BAHR: I was going to take us back
18 to the earlier -- the suggestion for the proposal
19 that, you know, there be a provision that says
20 that it basically has to be a practical
21 application of, for lack of a better word, the
22 judicial exception.

1 The one concern with that would be
2 that you still really don't define what an
3 abstract idea is.

4 Is it preferable to have it defined in
5 sort of the common law basis where you look at
6 the cases and you see which ones fit better? Or,
7 would you prefer, I'm going to say, another
8 sentence, which specifically defines what is or
9 is not an abstract idea? That's for anyone.

10 MS. AUTH: It's a really good question
11 and we actually debated it for quite a while
12 whether we should have something in there that
13 specifically sets out particular classes of
14 things that should be allowed that are
15 applications of laws of nature.

16 And, then, we thought, gee, how
17 presumptuous of us to think that we're going to
18 know what those things are in 50 to 75 years, let
19 a long a 100 years.

20 I mean, think about 50 years ago,
21 could they have imagined the computer programs
22 that we're now trying to claim or business

1 methods that we're trying to claim? I think not.

2 And, so, that's why we left it open to
3 future developments and thinking. And, maybe the
4 patent -- I think that's where the Patent Office
5 guidelines kind of can continue to help because
6 those are more immediate and those are something
7 that are an ever-evolving piece of work.

8 Whereas, the statute really is
9 intended to be something that you set up and you
10 allow the bushes to grow around it.

11 MR. REED: My view on it, is like I
12 had mentioned earlier is, I don't think we get
13 anywhere by defining what abstract ideas. I
14 think more the whole purpose of this law is to
15 say, everything is an abstract idea. Now, what
16 more is there to the claim? What is the
17 improvement in the technology? That's the whole
18 reason why patents are granted.

19 Look at it from that perspective. Is
20 the patent really trying to solve the technology
21 problems?

22 I don't think it's generally too

1 difficult for an examiner to look at a patent
2 application and decide, is the real thrust, is it
3 meeting a need like in the TLI case? Is it just
4 satisfying a need in an asset industry? Or, is
5 it clearly trying to solve a technology problem?
6 And approach it that way.

7 Where is the technology problem? How
8 much of the monopoly, if we grant the patent, is
9 just that technology solution? Or, is it more
10 than that?

11 MS. NELSON: I have a question for Mr.
12 Noonan. And you talked about the great number of
13 natural products that have, you know, issued
14 between a certain time period.

15 Is this something that's published or
16 are there studies that have actually talked about
17 and listed patents that were issued early on that
18 now would presumably not be patent-eligible under
19 Myriad?

20 MR. NOONAN: Well, yes, where it comes
21 from, there is actually -- there has actually --
22 the NIH study is published. And I think that a

1 fair reading of the initial way that the Office
2 was looking at the -- remember the amazonic acid
3 and things of that nature, would have made many,
4 if not most, of those patent-ineligible.

5 Because they're just, literally, if
6 you take the Myriad case to say that merely
7 isolating something from nature isn't enough,
8 then say, Taxol, which is isolated from the bark
9 of the yew tree, it would not be patent-eligible.

10 The problem with that is a couple-
11 fold.

12 One is, trees don't get cancer. So,
13 the fact of the matter that somebody figured out
14 you can get a molecule out of a yew tree that
15 could treat human cancer, that's the human
16 ingenuity part that I think deserves protection.

17 And, yet, I mean, I had a patent
18 examiner say this to me that, well, it inherently
19 cures cancer, that the problem is when you get to
20 that level, it's like the level of extraction
21 which, fortunately, I don't have to deal with in
22 my practice that much.

1 But the idea that, if you get down to
2 it, yes, everything inherently has this property.
3 The dividing line is, did you need a human being
4 to figure it out? Then, it seems to me that
5 that's a good place to draw the line and say,
6 that that should be patent-eligible.

7 MR. KELLEY: Does anybody on the panel
8 have any other questions?

9 Okay, well, thank you very much. Oh,
10 I'm sorry.

11 (Simultaneous speaking.)

12 MR. KELLEY: It's more of an
13 observation, but I think it's a fair one and I'll
14 phrase it as a question which is, isn't the
15 judicial diversity of our common law system
16 what's keeping things lingering?

17 That is, we sort of have these cases
18 pop up in different courts at different times and
19 we have to use them all at data points and the
20 diversity of decision makers and of the facts of
21 each case is what causes us to sort of stumble
22 over having a very bright line that's easily

1 applicable.

2 That's a lot more than it says on this
3 card.

4 MR. NOONAN: Yes.

5 MR. KELLEY: Okay.

6 MS. AUTH: Yes, well, that's what
7 common law is all about, right, the ability to
8 build synthesis of law and that's what this is.
9 Patent law presents many different possible
10 scenarios and then the court has to find a test
11 that works for them.

12 MR. KELLEY: Okay. Well, I thank the
13 panel.

14 And, we are going to take a ten minute
15 break and then start up again with the third
16 panel.

17 Thank you.

18 (Whereupon, the above-entitled matter
19 went off the record at 10:38 a.m. and resumed at
20 10:52 p.m.)

21 MR. KELLY: Thank you. Our first
22 speaker on the third panel will be joining us

1 from the Regional Office in Denver, Ms. Diane
2 Lettelleir, if I have that correctly.

3 I think we are having a sound problem.

4 MS. LETTELLEIR: No, you just have a
5 problem with not following instructions. I was
6 still on the mute button. So, now I think I am
7 on.

8 MR. KELLY: Yes, thank you. We can
9 hear you now.

10 MS. LETTELLEIR: We are actually
11 coming to you from Dallas, the Dallas Regional
12 Office, which is the new office that just
13 recently opened. So, we are happy to be here
14 joining you from this location.

15 I am a Senior Managing Counsel for
16 J.C. Penney Corporation, headquartered in Plano,
17 Texas. I want to thank Director Lee in the
18 Patent Office for the opportunity to present my
19 company's perspective on the legal contours of
20 the patent subject matter eligibility issues.

21 The Supreme Court's 2012 Mayo and 2014
22 Alice decisions have undeniably changed the

1 landscape of patent practice, thrusting subject
2 matter eligibility under Section 101 into the
3 forefront. However, these decisions do not
4 present a problem in need of an immediate
5 legislative solution. In 2012, Mayo specifically
6 addressed whether a patent claim was eligible
7 under Section 101 in the context of laws of
8 nature and natural phenomenon. In 2014, Alice
9 made it clear that the two-part Mayo test applied
10 to all patent eligibility questions under Section
11 101 and, specifically, to abstract ideas.

12 While the clarification made in Alice
13 as to the proper framework for analysis of claims
14 directed to abstract ideas may represent the end
15 of the cycle in patent law related to software
16 and business method patents, it is important to
17 consider the impact of Alice in the historical
18 context, as well as the geopolitical context.

19 In 1981, the landmark Supreme Court
20 case in *Diamond v. Diehr* changed established
21 patent law by holding that at least some software
22 could be patented. Then, in 1998, the Federal

1 Circuit ruled in State Street Bank that business
2 methods could also be patented.

3 These decisions set the stage for
4 expansive patentability and acted as a catalyst
5 for a rapid increase in patent issuance related
6 to software during the internet boom. The lack
7 of a clear test for patent eligibility during
8 this period failed to keep this expansion (audio
9 interruption) patents from this period later
10 became the subject of lawsuits brought by
11 non-practicing entities as patent litigation
12 dramatically increased.

13 The decisions in Diamond and State
14 Street and the patent enforcement programs those
15 decisions spawned were significantly disruptive
16 to operating entities. Technical innovations
17 developed and implemented by Main Street
18 businesses pre-State Street suddenly rendered
19 those businesses the target of patent enforcement
20 efforts decades later.

21 J.C. Penney has been the target of
22 more than 35 such lawsuits in the past seven

1 years. With 101 eligibility threshold challenges
2 largely ignored by the District Courts,
3 defendants such as J.C. Penney were required to
4 spend millions of dollars to prove invalidity
5 under other theories.

6 The decision in Alice was a
7 much-needed course correction. The exclusion of
8 abstract ideas from patentable subject matter was
9 not new. The exclusion had been in place for
10 decades. As more data points become available,
11 applying the proper framework for analysis, the
12 landscape has become more defined and more
13 predictable. The rate at which 101 challenges
14 are brought is already beginning to decline, as
15 more judicial decisions provide clarity on the
16 delineation on eligible and ineligible subject
17 matter. Eventually, the cycle of culling of
18 patents directed to ineligible subject matter
19 were wound down and the challenge rate were
20 normalized. A primary driver of this normalizing
21 over time will be the Patent Office's
22 gate-keeping function on subject matter

1 eligibility.

2 Geopolitical considerations also weigh
3 heavily in favor of the Supreme Court's reasoning
4 in Mayo and Alice. Many of the arguments the
5 detractors raised seemed only to assume that the
6 benefits to more expansive patentability will
7 inure only to American inventors, American
8 companies, American investors, and the American
9 public. The reality of overly expansive
10 patentability is that equal or greater benefit
11 will inure to foreign inventors, foreign
12 companies, and, in some cases, foreign
13 governments.

14 Allowing the unchecked patenting of
15 abstract ideas, laws of nature or natural
16 phenomenon by foreign companies possibly funded
17 by and even controlled by foreign governments
18 presents a real and significant threat to
19 American innovation, American companies, and
20 American interests. Foreign interests hold an
21 increasing stake in the U.S. Patent system and we
22 must be mindful of the potentially far-reaching

1 consequences of overly expansive patentability.

2 J.C. Penney does not support amending
3 the patent statute to further address these
4 issues or to attempt to further codify the
5 judicial exceptions held to be implicit in the
6 current language of the statute. Further
7 development of the contours of eligibility should
8 be left to the common law and the courts and
9 allowed to evolve as new technologies emerge and
10 then converge.

11 The notion that the Supreme Court has
12 no legitimate role in the development of patent
13 law is not a notion J.C. Penney supports. The
14 fact that the Mayo test is not a simple answer
15 does not mean that it is not the right answer.
16 The language of the NYIPLA has proposed as an
17 amendment is equally problematic, if not more so.
18 For example, what is a practical application of
19 an abstract idea, law of nature or natural
20 phenomenon?

21 During the previous Q and A session,
22 the consensus was that trying to define an

1 abstract idea is not the right path but, yet, the
2 failure of the Supreme Court to provide a simple
3 answer to that very question has drawn some of
4 the harshest criticism.

5 J.C. Penney does not support adoption
6 by statute of the machine-or-transformation test
7 rejected by the Supreme Court in Bilski. This
8 was one of the other questions that was posed for
9 today's consideration.

10 The machine-or-transformation test, in
11 practice, largely failed to appropriately
12 preclude the issuance of patents claiming
13 abstract ideas. While we may take comfort in
14 bright line tests, adoption of an exclusive
15 bright line test, such as the
16 machine-or-transformation test will likely have
17 unforeseen consequences in the future. We are
18 already seeing innovations that push the
19 boundaries of what may have previously been
20 thought to constitute a machine. The door is
21 left open for patents to issue for software or
22 business method innovations that are not just

1 abstract ideas implemented on general purpose
2 computers and that meet the other such statutory
3 requirements.

4 J.C. Penney agrees that innovation and
5 a healthy U.S. Patent system are important to the
6 U.S. economy. Patent protection and the right of
7 enforcement are two important components of an
8 innovation ecosystem. However, commercial
9 adoption of innovation is equally important.
10 Innovation cannot flourish in an ecosystem
11 without adoption of that innovation. Ultimately,
12 over expansive patentability operates to stifle
13 innovation and economic growth.

14 Thank you once again, Director Lee and
15 the PTO for hosting this roundtable event and
16 promoting a robust dialogue on these important
17 issues.

18 MR. BAHR: Thank you for your
19 comments. And I am a little remiss. Before we
20 get to our next speaker, we are now joined by
21 Chris Hannon from the Office of Policy and
22 International Affairs.

1 With that, I am going to turn to our
2 next speaker, Mr. Steve Bachman.

3 MR. BACHMAN: Thank you.

4 So, a bit about me. I am a patent
5 prosecutor. I have done patent prosecution for
6 about 17 years. I have done a little bit of
7 patent litigation. But most of my experience is
8 in software and hardware. So, I see a lot of the
9 Alice-based 101 rejections. So that is what I am
10 going to be talking about today is kind of a
11 little bit of a point of view on the prosecution
12 side, in particular with respect to the USPTO.

13 I had some slides but I will just kind
14 of keep talking and maybe they will come up but,
15 otherwise, you will just have to be entertained
16 by my voice. Oh, they are up. Okay.

17 So, I think there are several things
18 that have increased, that have kind of gotten
19 better about patent subject matter eligibility
20 analysis since Alice. I mean it is certainly not
21 a clear-cut process and there are a lot of
22 criticisms, many of them well-deserved. But some

1 things have gotten better.

2 One thing that I would like to talk
3 about is one that hasn't necessarily been
4 clarified through Alice and things that have
5 happened since then and that is regarding the
6 two-part Alice test, in particular, the second
7 prong. The idea I would like to get across is
8 that I believe the USPTO should ensure that
9 patent eligibility subject matter analysis focus
10 more on the innovative technology itself, as
11 opposed to any considerations about obviousness.
12 So, today I am just going to briefly talk about
13 getting to Alice, what has happened, and the
14 response to Alice by the USPTO in the courts and
15 how I proposed or some suggestions, for what it
16 is worth, to move forward.

17 So, starting with the basics. So, the
18 patent subject matter statute is 101 and it
19 basically states that patentable subject matter
20 is anything that is new and useful as a process,
21 machine, or manufacture, or composition. It does
22 not mention anything about obviousness. If

1 anything, maybe it hints a little bit towards
2 being novel, anything that is new. So, if
3 anything, in the statute it perhaps overlies a
4 little bit with 102. But there is nothing in the
5 statute, itself, that gives any hint to
6 obviousness.

7 So moving forward, obviously, we are
8 overall very familiar with Alice and the
9 two-pronged test is the claims at issue directed
10 towards a judicial exception, as an abstract
11 idea. And if so, is there any additional claim
12 elements that transform the nature into a
13 patent-eligible application and, in particular,
14 do the claims recite an element or a combination
15 of elements that amount to significantly more.

16 This two-prong test set forth by the
17 USPTO kind of produced a little bit of a shade of
18 obviousness. It is not pure obviousness and that
19 is why I think there has been a couple of
20 different paths that the courts and the USPTO
21 have expanded upon since the Alice case came
22 down. In particular, the phrase significantly

1 more has been interpreted in a couple of
2 different ways. In one way, it is related to the
3 prior art, such as is there an improvement to
4 another technology. Is there a limitation that
5 is not routine in the industry, ranging in
6 elements and unconventional manner?

7 So, in this line of consideration and
8 analysis, the significantly more term or test
9 part of the analysis considers other technology.
10 Things have already existed.

11 In the other path, it relates to just
12 the technology itself. Is there an improvement
13 that improves or makes a computer functionality
14 better, faster? Has it improved the memory
15 capability, the power savings, something like
16 that? It focuses on the technology itself
17 without any consideration as to what was done
18 before in other technologies.

19 Also, there are unconventional steps
20 that can find a claim to a particular useful
21 application. This also kind of relates just to
22 the kind of technology itself as opposed to other

1 types of prior art.

2 So, and the USPTO is here to help, as
3 we all know. And they provided several -- a
4 couple of different guidelines in response to
5 Alice. Some of their examples of ideas which
6 they said were not determined to be subject
7 matter eligible include human activities done by
8 computer, mathematical formula, and well-known
9 economic and financial practices. I think these
10 are all -- I think a lot of us would agree with
11 these that, at first glance, and even after
12 analysis, many of these should not be patentable.

13 They also did give some other example
14 of things that were subject matter eligible
15 because they provide significantly more. And
16 those include improvements to another technology,
17 improvements to the functioning of a computer,
18 things that are tied to computer technology or
19 adding specific limitations or conventional
20 steps. These are examples mostly taken from case
21 law that provide significantly more in the
22 determination made under Alice.

1 So, the courts have also responded to
2 Alice and though the USPTO has kind of given a
3 couple of different -- has focused some on the
4 technology parts, some on the evidence parts, the
5 courts, in general, tend to follow down the
6 obviousness parts. For example, let's take a
7 look at the Bascom case, Bascom Global Internet
8 Services v. AT&T Mobile. The technology at issue
9 in this case was internet filtering for a
10 filtering content -- or filtering content
11 forwarded to a controlled access network account.
12 The District Court analysis was very similar to
13 an obviousness one and the Federal Circuit culled
14 that out and they also pointed out without any
15 limitations or protections, if you are going to
16 do an obviousness type analysis, it can lead to
17 the conclusion of obviousness. And when the
18 obviousness is conflated with patent eligibility,
19 the test becomes even more subjective and is
20 wholly without boundaries.

21 So, if an obviousness analysis is
22 brought into the Section 101 analysis, at least

1 from a patent prosecution point of view, there is
2 no clear method and kind of the boundaries of the
3 game are much different than under 103. There is
4 no limit to the number of prior art references
5 they can bring up. And it clearly not as laid
6 out. And so it allows -- it makes an examiner's
7 job, one word would be, easier.

8 So, bumping up to the last slide, I
9 guess I just wanted to sum it all up saying that
10 hopefully new patent law framework will clarify
11 that 101 is an analysis based on technical
12 innovation but, at a minimum, hopefully the USPTO
13 will emphasize and train examiners to focus the
14 101 subject matter eligibility analysis on the
15 technology itself, rather than obviousness
16 considerations.

17 Thank you.

18 MR. BAHR: Thank you for your
19 comments. Now, we are going to have Mr. Jeffrey
20 Dean.

21 MR. DEAN: Thank you. And I want to
22 thank the panel, especially for this opportunity

1 to speak on this important topic and for hosting
2 this symposium on a question of great national
3 import.

4 I manage Amazon's patent litigation
5 docket. I also influence our amicus position,
6 policy positions with our government affairs
7 people in Washington. And as you probably know,
8 we are still, despite our best efforts, on the
9 top ten list of patent defendants in United
10 States courts and growingly, around the world.

11 I actually think that there is a
12 recent strand of jurisprudence coming out of the
13 Federal Circuit that has the question answered
14 almost perfectly. And it commends itself by
15 being able to explain a lot of the questions that
16 we are asking here as somehow being disparate or
17 even disconnected.

18 This strand of jurisprudence answers
19 the question what is an abstract idea. It tells
20 us exactly what preemption is. It tells us also
21 what is an inventive concept. It allows room for
22 software patents. It explains why 102, 103, and

1 112 are not simply duplicative and cannot do the
2 lifting of 101. And I have two-year-old twins at
3 home, so I have been watching a lot of cartoons.
4 So, I have been calling the 101 cases where
5 eligibility has been found, the Furious Five. If
6 you ever watched the Kung Fu Panda movie, that
7 will ring a bell for you. But it explains those
8 cases as well and it also harmonizes our law with
9 150 years of Supreme Court precedent.

10 Now, what is that rule? That rule is
11 the distinction between a result and a way of
12 achieving it, or an idea and the application of
13 that idea. As we know, no one gets to own a
14 result. That goes back 150 years. It is a great
15 rule. It goes back to the Samuel Morse case, no
16 slouch inventor in American history. A
17 rubber-tipped pencil, another good case, ideas
18 are not patentable.

19 So what, then, becomes an abstract
20 idea? There is a little bit of redundancy in
21 that term. An idea, itself, really is abstract.
22 You don't need to call it an abstract idea if all

1 you are trying to do is patent the idea.

2 For example, a yellow rubber duck --
3 again, I am a new parent -- is a think yellowness
4 to all philosophers we would know as an
5 abstraction. It is a thing that exists as an
6 idea or an ethos, as the Greeks would have called
7 it.

8 It is one thing to say that it would
9 be a great, neat, cool, and an economically
10 valuable thing to deliver packages with model
11 airplanes. It is an entirely different thing to
12 tell the world how you do it. We defend
13 countless litigations attacking our magical, at
14 least in my untutored view, a product
15 recommendation system by people who have been
16 awarded patents on the neat, cool, and
17 economically valuable idea that you recommend to
18 customers things that they might be interested in
19 purchasing without any regard for how you might
20 do it.

21 An abstraction is a result that has
22 been untethered from, disassociated from. In

1 other words, in English usage, abstracted from a
2 particular way of achieving the result. If your
3 patent says that this is a result for which there
4 is great demand in America, the economy would
5 love it. I don't care how you do it. My patent
6 is agnostic about it. You have an abstraction.
7 It is that simple.

8 You also have something that is
9 preemptive. What is preemption, after all? It
10 is preventing other people from achieving exactly
11 the same result in a different, cheaper, better,
12 and more efficient way. That is what the Supreme
13 Court said in the Morse case and it is exactly
14 what the Federal Circuit is saying in recent
15 cases like the Electric Power Group, like
16 Affinity Labs v. Amazon, like OIP vs. Amazon.
17 You can tell we have been pushing this idea
18 before the Federal Circuit a lot.

19 There are two engines of innovation in
20 this country, not just the protection of
21 investment in a particular contribution to the
22 public store of knowledge for which we give a

1 patent, but the other engine of innovation, which
2 is the public's right to achieve the exact same
3 utility and result in a different way. That
4 engine gets sometimes short shrift in
5 professional circles but let's not ignore the
6 fact that it is of equal dignity in a system that
7 advances science and useful arts.

8 So, this explains also what preemption
9 is. Are you claiming all ways of achieving a
10 result without contributing a single one? The
11 very anathema of a healthy patent system. After
12 all, Justice Breyer, in Mayo, told us that the
13 problem with preemption is a relative one. You
14 are removing more from the public's domain than
15 you are contributing to the public store of
16 knowledge. That is exactly what happens when you
17 claim a result independent of a particular way of
18 achieving it.

19 This distinction also tells us what an
20 inventive concept is. Inventions are not
21 aspirations. Wouldn't it be neat if? Wouldn't
22 it be valuable if? Wouldn't it be cool if? That

1 is important. Don't get me wrong. That is an
2 important part of the inventive spark but an
3 invention is ultimately how you do it -- your way
4 of how you do it.

5 We were talking about the arc of
6 history. There is an old expression in the
7 Jewish tradition about -- from Rabbi Hillel:
8 Don't do what is hateful to others. That is the
9 whole of Torah. The rest is commentary.

10 In the patent system, you award people
11 what they invented and no more. That is the
12 whole of patent law. The rest is commentary. It
13 protects both engines of innovation.

14 So, what is the invention? The
15 invention is how you do it your way, your
16 particular way. And if your particular way is
17 valuable, people will pay you for it and they
18 should. And if it turns out that there is
19 another way of achieving exactly the same result
20 with exactly the same economic utility in a
21 different way, not only should you not be able to
22 tax that, but the public should be liberated in

1 order to achieve that. So, the inventive
2 concept, again, is explained as the way or the
3 how.

4 It explains a lot about the contours
5 of software eligibility. I have heard people
6 complain at how can these software patents be
7 consistently invalidated? Well, the software
8 patents are software patents without software.
9 It is a patent without an invention, those that
10 have been invalidated. If you want to show your
11 way, we have a vocabulary for that. It comes out
12 of our 112 jurisprudence. It is called your
13 algorithms. And if it turns out that someone
14 wants to do it your way, well, boy, they should
15 pay you for it. And if it turns out that people
16 can do it a different way, well, gee whiz, the
17 public should be able to do that. That is the
18 second engine of innovation.

19 So, we have that vocabulary in order
20 to create a line between what would be abstract
21 and not in the software case. It also explains,
22 frankly, why 101 is not simply duplicative.

1 Oh, I'm sorry. I will just leave it
2 at that. I think that the Federal Circuit has
3 really hit on something here and we need to focus
4 on the distinction between a naked result and
5 your particular way of achieving it.

6 MR. BAHR: Thank you for your
7 comments. Next we have Sharon Israel.

8 MS. ISRAEL: Thank you. Good morning.
9 I am Sharon Israel, representing the American
10 Intellectual Property Law Association. AIPLA
11 appreciates the opportunity to briefly present
12 views on Section 101 jurisprudence and its impact
13 on the U.S. Patent system.

14 As Barbara Fiacco stated, on behalf of
15 AIPLA during the first roundtable on examiner
16 guidelines, our experience is that there is
17 confusion and inconsistency in examination
18 decisions on patent eligibility within the
19 office. At the same time, there has been a sharp
20 uptick in litigating Section 101 issues before
21 the courts and also before the Patent Trial and
22 Appeal Board. The result is uncertainty and

1 inefficiency for patent applicants and litigants.
2 This is not healthy for our patent system and
3 puts the incentives to innovate at risk.

4 In December 2013, AIPLA's former
5 executive director testified before the Senate
6 Judiciary Committee and noted the following.
7 Probably the most tumultuous issue in patent law
8 right now is a question of patent eligibility
9 under 35 USC Section 101. While that statutory
10 language is fairly straightforward, identifying
11 the various categories of inventions that are
12 patentable subject matter, the Supreme Court,
13 years ago, staked out exceptions to statutory
14 subject matter, where the patents recite a law of
15 nature, a natural phenomenon, or an abstract
16 idea.

17 At that same time, the case of Alice
18 Corporation v. CLS Bank International was pending
19 before the Supreme Court. AIPLA believed that
20 case could resolve numerous questions created by
21 past decisions. However, rather than resolve
22 those questions, the Supreme Court's decision in

1 Alice and the cases that have followed, have
2 continued to create problems and confusion.

3 Section 101 jurisprudence and its
4 application by the USPTO and the courts have
5 become the issues of greatest concern among
6 AIPLA's members. In the past ten years, AIPLA
7 has filed over a dozen amicus briefs in Section
8 101 cases pending before the Federal Circuit and
9 the Supreme Court. AIPLA's views have been
10 consistent. The language of Section 101 sets
11 forth subject matter categories of what is
12 patent-eligible and any limits on eligibility
13 should be few. However, we remain concerned that
14 the court's expansive application of judicial
15 exceptions to eligibility has had an adverse
16 impact on innovation in the United States.

17 The Supreme Court has recognized that
18 patent ineligibility determinations require a
19 delicate balance. In *Mayo v. Prometheus*, the
20 court cautioned that too broad an interpretation
21 of this exclusionary principle could eviscerate
22 patent law. As applied, Section 101 too often

1 has provided an easy blunt instrument to deny
2 patent protection. In such cases, other possible
3 grounds for finding patent claims invalid or
4 claims in an application unpatentable, more
5 prudently could be based on prior art and other
6 conditions of patentability set forth in Sections
7 102, 103, and 112.

8 On purpose of the judicially excluded
9 subject matter categories has to prevent
10 patentees from overreaching in preemptively broad
11 areas that suppress, rather than incentivize
12 innovation. While Section 101 may be needed for
13 that purpose, Section 101 jurisprudence has been
14 applied in a manner that often overcorrects for
15 overreaching patentees. Broad claiming, poor
16 claim drafting, and poor patent quality in
17 general are all important issues to address but
18 not through the blunt instrument of Section 101
19 eligibility.

20 Section 101, as an enabling provision
21 addressed to particular categories of inventive
22 subject matter typically is not the proper

1 standard for deciding whether a particular
2 technical advance should receive patent
3 protection. Using Section 101 for that purpose
4 has produced the same degree of uncertainty in
5 the law that motivated Congress to establish the
6 federal circuit more than 30 years ago. Patent
7 eligibility decisions often turn on specific
8 facts of each case, including the details of the
9 claim language, the specification, the
10 prosecution history for the patents involved.
11 This has made it difficult for applicants,
12 patentees, and the public to discern the limits
13 on what is patent-ineligible. The application of
14 the case law sometimes appears inconsistent from
15 case to case.

16 As noted at the first roundtable on
17 examiner guidelines, AIPLA has concerns that a
18 Section 101 rejection has become an
19 insurmountable barrier and that examiners do not
20 feel empowered to recognize when an applicant has
21 met his or her burden of proof. That same
22 barrier exists in the courts where a Section 101

1 ineligibility analysis has become the first step
2 in litigation. While this may be the result, in
3 part, of overly broad patents being asserted,
4 patent ineligibility should not be the threshold
5 test in typical cases.

6 AIPLA also has concerns about how
7 recent Section 101 jurisprudence puts the United
8 States at risk of falling behind other developed
9 patent systems. Subject to certain exceptions,
10 Article 27 of TRIPS states that patents shall be
11 available for any inventions, whether products or
12 processes, in all fields of technology, provided
13 that they are new, involve an inventive step, and
14 are capable of industrial application. AIPLA has
15 a long history of supporting patent eligibility
16 for all inventions that can be shown to provide a
17 useful concrete and tangible result.

18 When AIPLA first adopted this position
19 in 2001, it noted that as technology has
20 progressed into previously uncharted areas, the
21 U.S. Patent system has been the incubator for
22 groundbreaking means to provide incentives for

1 innovation ahead of other highly-developed patent
2 systems in, for example, Europe or Japan. As the
3 case law has developed in the United States, we
4 risk no longer being compliant with TRIPS and
5 falling behind other developed patent systems of
6 the IP5.

7 In December of 2014, when I was
8 President of AIPLA, I created a Patent-Eligible
9 Subject Matter Task Force to explore the concerns
10 of AIPLA members relating to Section 101 and to
11 consider mechanisms to address those concerns.
12 The Task Force has continued its work since that
13 time. The issues involved are complex and, in
14 our view, the courts have not been able to
15 adequately address the problems in applying
16 Section 101. While we are not prepared to offer
17 specific solutions today, we continue to explore
18 options, including legislative proposals that
19 will help increase certainty and efficiencies in
20 our patent system and promote innovation.

21 AIPLA is grateful for the opportunity
22 to present its views on Section 101 jurisprudence

1 and its impact on the U.S. Patent system. We
2 look forward to working closely with the office
3 and others on these issues going forward. Thank
4 you.

5 MR. BAHR: Thank you for your
6 comments.

7 Our next speaker is Kim Schmitt.

8 MS. SCHMITT: Good morning, everyone.
9 I'm Kim Schmitt. I am Managing Counsel at Intel
10 Corporation, here at Silicon Valley. I have
11 responsibility for overseeing some of our patent
12 litigation. And what I am hoping to do today is
13 share with you a case study on 101 that we have
14 seen in our litigation docket that I think helps
15 illustrate the practical implications of a lot of
16 the policy that we have been discussing here
17 today on 101.

18 Section 101 has proven, post-Alice, to
19 be a very useful tool in getting rid of bad
20 quality patents. And whatever changes we affect
21 to make the current situation, I guess, more
22 clear, I would caution against dialing back the

1 ability to use 101 as a tool to get rid of poor
2 quality patents.

3 So, today I want to talk to you a
4 little bit about a case that was handed to me
5 when I came in-house, about four years ago, to
6 Intel. It had been brought by a non-practicing
7 entity. They were asserting two patents relating
8 to graphics processing. The technique was
9 basically taking a three dimensional scene and
10 rendering it on the two dimensional screen. And
11 the claims the patent described basically taking
12 an object, deciding if it was obscured by another
13 object when you were rendering it on the screen,
14 and if, for example, this cup was obscured by
15 this piece of paper, I wouldn't need to waste
16 time processing the graphics that would be needed
17 to render the cup.

18 What the patent suggested you do to
19 decide whether you render the cup or not was to
20 take a depth measurement. Is the cup deeper in
21 the scene than the piece of paper? And is the
22 piece of paper over the cup? So, it is basically

1 something you could take a look at and if I were
2 just drawing a picture, instead of programming it
3 on a screen, I could visually kind of eyeball it
4 and say oh, yes, the cup is deeper. I am not
5 going to bother drawing a cup that I am just
6 going to draw another piece of paper over.

7 The claims didn't have any sort of
8 particular computer hardware associated with it.
9 It was just conventional memories and it could be
10 any generic computer architecture. But these
11 patents were being asserted against our CPUs and
12 this is, obviously, a multi-billion dollar
13 business for Intel. So, we take this kind of
14 thing seriously.

15 This hasn't been the first time these
16 patents were asserted. Actually, these patents
17 had been asserted numerous times over the course
18 of a decade against a number of companies. They
19 had been asserted against Hewlett-Packard in
20 2001, Silicon Graphics in 2003, I-O Data Device
21 in 2004, ATI Technologies 2005. You can see
22 there was a number of cases, I think seven in

1 total prior to ours coming along. And in every
2 instance, it appeared that all of these companies
3 had basically settled out early in the case
4 before any of the cases had moved very far along.
5 Of course, our assumption is that the settlements
6 were done for basically cost of litigation
7 values. And so given the choice between taking
8 the case to trial and trying to get these patent
9 claims invalidated in a pre-Alice, pre-Bilski
10 world, these companies had decided that they
11 would just simply pay the holdup cost and get rid
12 of this thing and get it off their dockets
13 because taking these cases to trial is expensive.
14 And ultimately, if you are in front of a lay
15 jury, your results aren't necessarily guaranteed,
16 even though coming at it from the better part of
17 a decade and a half of litigation experience, you
18 would say that these claims should not be out
19 there, they shouldn't have been in the patent
20 ecosystem.

21 So, by the time it comes to us, we
22 have a decision on Bilski. This is still prior

1 to Alice but Bilski is out there. And we have
2 the opportunity now, a meaningful opportunity to
3 try and get rid of this case at the pleading
4 stage. So, we bring a motion to dismiss on the
5 pleadings. It is still early days and our judge
6 wants to make sure she is doing the right thing
7 and so she actually converts the motion into a
8 summary judgment motion and asks for some claim
9 construction briefing.

10 Ultimately, after a very thorough
11 analysis and Alice coming out in the interim, the
12 judge decides that yes, in fact, these claims are
13 not directed to patent-eligible subject matter
14 and grants our summary judgment motion. The
15 Federal Circuit ended up affirming with a summary
16 affirmance.

17 And finally, after going after
18 numerous companies, these patents are done. It
19 is basically -- I don't know how much this cost
20 these companies, many of which are not around
21 anymore. But I don't know how much it cost them
22 in their businesses. I don't know how much was

1 taken away from R&D efforts that could have gone
2 to those efforts but here is a pretty clear
3 example of how this plays out and how the tool
4 that 101 gives us can play out very early on and
5 give us, I guess, greater efficiency in the
6 system to get rid of bad patents at an early
7 stage prior to the expense of discovery, prior to
8 the expense of taking this all the way through
9 litigation.

10 So, I would encourage the folks here
11 today who are considering policy efforts on this
12 to consider this. I mean obviously, it is just
13 one experience but it does, I think, help
14 illustrate how the current case law and the
15 current state of 101 policy is beneficial to
16 operating companies and is helpful to make the
17 system operate more efficiently.

18 Thank you very much for letting me
19 speak here today.

20 MR. BAHR: I thank you for your
21 comments.

22 Next, we have Mr. Eric Sutton.

1 MR. SUTTON: Thank you. Oh, wow.
2 Firstly, both personally and on behalf of -- oh,
3 and I do have slides, which don't currently
4 appear.

5 Both personally and on behalf of
6 Oracle, I would like to thank the Patent Office
7 for hosting this event to gather feedback
8 regarding patent eligibility post-Alice.

9 I kind of want to wait for the slides,
10 if -- could I pause my time? I would be happy to
11 start over with my one sentence.

12 All right, I want to start by noting
13 that the public is the biggest stakeholder in the
14 patent system and the public's well-being,
15 through the promotion of technical innovation
16 should be our primary goal. Our presentation
17 attempts to identify both the good and the bad
18 about the current state of patent eligibility to
19 guide the discussion to the extent possible on
20 keeping the good, while improving the bad. Next
21 slide.

22 Many here, especially law firm

1 counsel, might wonder what we have included as
2 good about the current state of patent
3 eligibility. Firstly, patent eligibility now has
4 a threshold analysis, as mentioned by Director
5 Lee, for efficiently disposing of cases with
6 nontechnical innovation, both in prosecution and
7 in litigation. In a minute, I will explain the
8 words technical and nontechnical to show you that
9 we are not making this up as we go along.

10 Secondly, it is nearly impossible to
11 protect nontechnical innovation in the current
12 patent eligibility landscape.

13 Thirdly, highly technical innovation
14 often efficiently goes to art units with high
15 allowance rates where the focus for those cases
16 is properly on 103, rather than 101. Next slide.

17 What do I mean when I say there is a
18 threshold analysis for efficiently disposing of
19 cases with nontechnical innovation? The current
20 patent eligibility framework introduced an
21 invalidity threshold analysis that does not
22 require expert testimony or discovery. The

1 analysis is used for claim that were so broad
2 that the only point of novelty itself lies in
3 financial practices or activity practically
4 performed in a human-like manner, such as in the
5 mind, on paper, or verbally. Whether you call
6 these claims nontechnical, as we have here, or
7 use a different term, the reality is that these
8 claims are not making it through the patent
9 system. This invalidity threshold analysis is
10 efficient when advising clients or making
11 prosecution enforcement, licensing, or defensive
12 decisions, as the analysis increases the
13 confidence and early finding of ineligibility for
14 claims that would have been found to be not
15 patentable one way or another, as explained
16 earlier by Professor Lemley. And also, on this
17 point, it seems that we agree more with Intel
18 than with AIPLA. Next slide.

19 In the past, even nontechnical
20 innovations were protected by merely adding that
21 the claim was performed by a computer. That
22 strategy no longer works and that is intended.

1 Even if a nontechnical case slips through here
2 and there, in the aggregate, the statistics show
3 that protecting any given nontechnical innovation
4 is practically impossible, as several art units
5 have allowance rates that fluctuate below ten
6 percent.

7 CBM and District Court statistics
8 aren't any better for these types of cases. Next
9 slide.

10 That said, technical innovation, where
11 the point of novelty does not rest in financial
12 practices or activity practically performed in a
13 human-like manner, and where the spec describes
14 the how, generally still enjoys high allowance
15 rates, despite art unit variance. We think these
16 good aspects of patent eligibility post-Alice
17 should not be overlooked in meaningful
18 discussions, such as the ones we are having
19 today. Next slide.

20 There are also several areas that
21 could use attention and improvement. Firstly, a
22 significant amount of corporate and Patent Office

1 resources are being spent creatively defining
2 abstract ideas. In a minute, I will explain why
3 this indirect analysis is wasteful. Secondly,
4 there is a low predictability and high variance
5 for claims, depending on their key words,
6 regardless of whether the point of novelty is
7 technical.

8 Thirdly, there is a disproportionate
9 emphasis being placed on 101, even for technical
10 innovation where 101 should be satisfied. Next
11 slide.

12 The Alice framework requires, in the
13 first part, identifying an abstract idea and
14 then, in the second part, searching for an
15 inventive concept that is left over. As hinted
16 by Peter Su, this analysis is unnecessarily
17 complex when the elements are considered
18 non-abstract in the first part -- where the
19 elements considered non-abstract in the first
20 part are also the elements that may qualify as
21 significantly more in the second part, regardless
22 of how the abstract idea may be creatively

1 re-identified in the first part.

2 In practice, claims pass muster under
3 101 if they have technical innovation focused
4 outside of financial practices and also outside
5 of activity practically performed in a human-like
6 manner or, conversely, if they rooted in computer
7 technology. This technical innovation satisfies
8 the first part of the framework and cannot be
9 ignored in the second part by creatively
10 revisiting the first part. For these reasons,
11 the patent eligibility framework should be
12 efficiently resolved based on whether or not
13 there is a technical point of novelty, without
14 having to dive deeply into stretched examples.
15 Next slide.

16 The problem of low predictability and
17 high variance is most noticeable when claims have
18 equal probabilities of landing in high allowance
19 art units, such as Art Unit 3659, an 89 percent
20 allowance rate, and low allowance art units, such
21 as Art Unit 3689 with a 2 percent allowance rate.

22 Although art unit forum-shopping tools

1 can help the applicant steer the application
2 toward high allowance art units, these tools
3 encourage applicants to make keyword changes that
4 are tangential to the point of novelty. Such
5 changes should not affect the search for a
6 technical inventive concept under Alice, even
7 though they do effect art unit assignment. Next
8 slide.

9 Perhaps a topic best covered at these
10 roundtables so far, including by Steve Bachman,
11 has been the disproportionate emphasis on 101
12 over 103. Section 103 provides an in-depth
13 analysis from the perspective of a person having
14 ordinary skill in the art. Although this
15 in-depth and obviousness analysis might not be
16 reached for claims without a technical point of
17 novelty, the obviousness analysis should still be
18 applied to ensure the proper consideration of
19 claims that do have a technical point of novelty.
20 Next slide.

21 We think there are ways to steer the
22 post-Alice landscape to turn the bad into good

1 while still keeping the good: 1) Preserve a
2 threshold analysis for subject matter where the
3 only point of novelty lies in financial practices
4 or activity practically performed in a human-like
5 manner; 2) Preserve a robust filter for
6 nontechnical innovation; 3) Efficiently advance
7 technical innovation to reduce the cost of
8 legitimately seeking patent protection; 4)
9 Deemphasize indirect arguments in favor of
10 arguments related to finding or not the technical
11 point of novelty, as this also satisfies the
12 indirect arguments; 5) Guard against art unit
13 variance to the extent that the variance is not
14 related to whether or not there is a technical
15 point of novelty; 6) Investigate and correct art
16 unit assignment mistakes; and 7) Reemphasize 103
17 for cases difficult to decide under 101.

18 Thanks.

19 MR. BAHR: Thank you very much for
20 your comments. Now, we are going to have a
21 question and answer session with the panel.

22 The first question I have for Mr.

1 Jeffrey Dean. The cases you discuss where you
2 are going for a result versus a way, in this
3 does it matter whether the claim covers the
4 result if it discloses the way or does the claim
5 need to be limited to a particular way, do you
6 feel, in these situations?

7 MR. DEAN: So, I am not sure. I might
8 have the question wrong.

9 MR. BAHR: I'm sorry. In many of the
10 cases it seems that the courts looked to the
11 specifications to see is there an improvement, if
12 you will, in computer technology. They look to
13 the spec to see this.

14 So, for this way of analyzing these
15 cases, does it matter that the claim covers the
16 specific way or can the claim also just cover the
17 result but the specification disclose a way to
18 accomplish the result?

19 MR. DEAN: Right, now I understand.
20 So, going back to our first principle, which is
21 that in any healthy patent system what you
22 contributed to the public store of knowledge

1 should be protected but no more and the rest of
2 commentary, of course a claim should be limited
3 solely to the particular way of achieving the
4 result that the applicant contribute to the
5 public store of knowledge. The very reason that
6 we anguish about our patent system today is
7 because, too often, a claim is construed to
8 capture ways of achieving a result that were
9 never invented, much less contributed to the
10 public store of knowledge by the applicant.

11 So, if we can realign ourselves to our
12 first principles and recognize that in any
13 rational world you get protection for what you
14 contributed but no more, then, of course, the
15 claim has to be limited to the particular way of
16 achieving the result. Now, that doesn't mean
17 that we offend the prohibition against construing
18 claims to be limited to the preferred
19 embodiments. We have a rich and mature
20 vocabulary how to avoid that. But yes, I think
21 we run smack dab into the preemption problem when
22 we say you get ways of achieving that result that

1 you never conceived as evidenced by your patent
2 application.

3 MR. BAHR: Thank you.

4 MR. KELLY: So, I have a question
5 about the function versus way. And you brought
6 it up but anybody can answer it. Right now, if
7 somebody has a functional result and it is
8 enabled so that somebody could do that, a claim
9 that recites delivering packages with small
10 airplanes -- attach the package to an airplane;
11 dispatch the airplane; land it; release the
12 package; return, that is probably not enabled as
13 I just explained it but assume it is enabled.
14 Then why shouldn't that patent issue?

15 I mean at some point, we will have to
16 get into layers of deeper and deeper specificity
17 until it is enabled. But if someone comes up
18 with an invention that is enabled, albeit broad,
19 what is wrong with that?

20 MR. DEAN: So, years ago we asked
21 exactly that question in the context of 112,
22 coming out of the biotech area. And the question

1 was is there a separate requirement for written
2 description, other than just the enablement
3 requirement. And that got answered by the
4 Federal Circuit in a number of cases and the
5 point was that they achieve different purposes.

6 Obviously, you need to enable the full
7 scope of the claim because that has its own
8 protections against a certain kind of preemption.
9 But the written description requirement protected
10 us from awarding patents for things people had
11 not in fact invented or conceived. And that
12 meant over-rewarding the applicant and
13 overburdening the public, that second engine of
14 innovation.

15 So, we made sure that we invigorated
16 a separate written description requirement to
17 assure us that there was evidence that you
18 actually contributed this to the public. Forget
19 that 15 years later a professional expert witness
20 can take the stand and say yes, reading only this
21 application that was filed in 1981, I could have
22 invented amazon.com website, which is a case

1 argued this morning in the Federal Circuit.

2 So, they serve different purposes.

3 And 101, of course, serves the third purpose,
4 which is to ask the question is there a candidate
5 for examination in the first place. That is, is
6 there a way at all in the patent? Once we have
7 satisfied that, then we can interrogate that way
8 according to the other requirements for
9 patentability. But let's first remember that it
10 is extremely important not to burden our public
11 resources of this office, much less the public in
12 expensive litigation, to subject a patent claim
13 to the interrogations of patentability when there
14 isn't a candidate invention in the first place.

15 MR. HANNON: I have a question for Ms.
16 Israel. You mentioned TRIPS Article 27. And my
17 question is is the AIPLA's position that under
18 Article 27, the Mayo two-step framework is
19 somehow an additional patentability criteria? Is
20 that your comment?

21 MS. ISRAEL: I don't want to go that
22 far at this point but we are concerned about how

1 the case law has developed that we are getting
2 into an area where we may no longer be TRIPS
3 compliant.

4 MR. BAHR: Some follow-ups. There
5 were several comments about, I am going to call
6 it, the comingling of Section 103, obviousness
7 standard, and 101 and then another comment that
8 perhaps the 103 tool should be used, I am going
9 to say, before 101 to sort of resolve difficult
10 questions there.

11 Does anybody -- I am just curious do
12 other members of the panel have any comments on
13 that, either of those?

14 MR. DEAN: Briefly, I do think they
15 are doing different things. So, we know that
16 there are new things. Let's go back to the
17 delivering the packages. No doubt that ways of
18 doing that will be new. And yet, if you don't
19 disclose a way, query whether you have an
20 invention, at the same time, there are arguably
21 ways of doing very old things but those ways are
22 new.

1 And so if we just looked at the result
2 and said well that is an old result; we can't
3 possible issue a patent for that. But maybe you
4 can if, in fact, the way is innovative. So that
5 question of is there a way in the first place
6 really is a critical threshold question because
7 we could avoid a lot of the examination if it is
8 not.

9 MR. SUTTON: For efficiency, I think
10 it is often more efficient to look at 101 first
11 because, like in the case that was on my slide,
12 if the invention is just trying to send a
13 communication until it is successful, then you
14 probably don't have to look at the prior art.
15 And 103 requires a very detailed analysis that
16 considers a person of ordinary skill. And that
17 analysis requires a rational underpinning, as
18 stated in KSR, first in re Kahn. And I think
19 that full analysis can be avoided in some cases,
20 where there is no technical point of novelty.

21 MR. BACHMAN: And I would just like to
22 add that oftentimes, practically speaking, when

1 there is a 101 rejection, there is also, very
2 often, a 103 rejection in the same office action.
3 So, they often are kind of approached in
4 parallel.

5 But I think, like Eric mentioned, I
6 think it would be much more efficient to keep the
7 101 on a technical level, a technical analysis,
8 without considering the prior art just for a more
9 efficient either does it pass or not pass 101
10 and, therefore, you don't even need to get to the
11 103.

12 MR. BAHR: If no one else -- I have a
13 -- sorry to put you on the spot again, Sharon.
14 My question is I know your organization, AIPLA,
15 doesn't have a specific proposal but many of the
16 concerns you raised are inconsistencies or
17 confusion in applying the various tests or the
18 frameworks.

19 Now, just from an administration point
20 of view, or someone who writes guidelines, I will
21 tell you that rigid tests are easy to apply
22 consistently. Flexible tests are more difficult

1 to apply consistently. Is there any thought of
2 any, you know the tradeoffs that are inherent
3 there? Is there a preference for a flexible
4 approach, or a more rigid test, or is this just
5 something that is not discussed?

6 MS. ISRAEL: I think I could say it is
7 something I am not prepared to address right now.

8 MR. BAHR: Well, that tells us
9 something.

10 MS. ISRAEL: It is a complex issue.
11 We have had a Task Force that has spent two years
12 looking at the problems, at potential solutions,
13 and we have identified a lot of pros and cons on
14 potential solutions. And it is just not easy to
15 come up with the silver bullet.

16 MR. BAHR: Sorry, I guess my other
17 question was for Mr. Sutton about you had made a
18 group of suggestions. Now, were those
19 suggestions things you have for changes to
20 examination practices or were you thinking things
21 that needed to be done, I am going to say,
22 legislatively or something; something we could

1 just do or something that you thought maybe the
2 law needs to be changed so that it would operate
3 in that manner?

4 MR. SUTTON: I actually don't think
5 any of my suggestions required a change in the
6 law. I think that they can be addressed on all
7 fronts. It would be clearer, if there was a
8 change in the law in some cases. But for the
9 first three things on that list, those were from
10 the positive slides about the current state of
11 the law. So, that is kind of the way it already
12 is.

13 The first three bullet points there
14 were just don't mess that up when we start to
15 think about what needs to be done.

16 And so the latter slides, especially
17 the forum-shopping issue, is something that I do
18 think the Patent Office can address and really
19 legislation can't address. And it is the
20 balancing of technologies among the art units in
21 a way that these tools, these art unit
22 forum-shopping tools become less important. But

1 right now, when you have two art units that
2 relate to e-commerce, one with a two percent
3 allowance rate and the other one with ninety-ish
4 percent allowance rate and you are filing a
5 patent for an invention in the e-commerce field,
6 I think it would be dumb to not try to write your
7 patent so that it has key words that match one of
8 those two art units and not the other.

9 MR. BAHR: Thank you.

10 MS. NELSON: I have one more question
11 for Mr. Dean. When you talked about looking for
12 or expecting there to be some sort of a
13 description of a way and not just a result, you
14 are talking in terms of an algorithm. And I
15 think that is something that the court has sort
16 of struggled with in how to define that because,
17 obviously, at its narrowest meaning, it would be
18 almost like a computer software but at a broader
19 definition it is almost just a series of steps
20 which doesn't seem to get you much further to get
21 where you want to be.

22 So, I am just curious if you have a

1 definition for algorithm.

2 MR. DEAN: So, I am going to
3 disappoint you and say no. But I do think,
4 though, that we are in a better world if we say
5 this should be the focus of our intellectual
6 energy, how to define that, the sufficiency of
7 algorithmic instructions in a patent application.
8 That would be a terribly profitable way for us to
9 spend our time, knowing that if there isn't one,
10 then we don't have a candidate for further
11 examination and that is why it is more than a
12 course eligibility filter. It is an essential
13 aspect of whether we should devote public
14 resources to the question.

15 And then as far as what satisfies,
16 what level of rigor should we have for 101, I
17 don't have an answer to that. But I think it is
18 a very important question. And I think we can
19 benefit from some of the thinking that is going
20 on both from the Office with respect to the 112
21 area, and 112(f), especially, and also the
22 Federal Circuit.

1 Obviously, in 112 area, we don't allow
2 structureless patents. And so if you don't claim
3 under 112(f), that is okay. You can still have
4 your structure in the claim. For example, you
5 can still have your algorithm in a claim so that
6 you wouldn't have to resort to 112(f).

7 At the same point, you could construe
8 like, for example, the court did, I think in
9 *Amdocs*, a claim limitation to have some of the
10 structure that comes from the specification, just
11 as a matter of pure claim construction.

12 But if you don't have structure in the
13 claim or the specification, then it really
14 shouldn't matter what magic words you use, for
15 example. You don't have a candidate for
16 examination. But I do think if you really put
17 your finger on the question, I think that is
18 where the energy should be in the software area,
19 how to define that.

20 MR. BAHR: I would like to thank our
21 third panel for being with us and invite the next
22 panel to come up. But thank you all very much.

1 MS. NELSON: I would like to welcome
2 Mr. Frank Cullen

3 MR. CULLEN: Thank you very much. My
4 name is Frank Cullen. I am the Executive
5 Director at the U.S. Chamber of Commerce Global
6 Intellectual Property Center. I head up the
7 Chamber's Intellectual Property Advocacy and
8 Policy work.

9 The U.S. Chamber of Commerce is the
10 world's largest business federation, representing
11 the interests of more than three million
12 businesses of all sizes, sectors, and regions, as
13 well as state and local chambers and industry
14 associations. We are dedicated to promoting,
15 protecting, and defending American's free
16 enterprise system, and long supported appropriate
17 intellectual property policies to help support
18 and drive innovation, economic growth, and job
19 creation.

20 On behalf of the U.S. Chamber of
21 Commerce, I am grateful for the U.S. Patent and
22 Trademark Office, and specifically to Director

1 Lee, for holding today's important roundtable and
2 providing this opportunity for the Chamber's
3 Global IP Center to submit comments on behalf of
4 our members on this important topic.

5 The issue of patent subject matter
6 eligibility is of great interest and growing
7 concern to the IP sector industries and those who
8 invent and innovate. Numerous studies have
9 established the link between a strong IP system
10 and economic growth and job creation.

11 The Chamber's Global Intellectual
12 Property Centers annual IP index report includes
13 metrics related to individual countries' patent
14 systems as part of the criteria and data and that
15 data is number one indicator of the strength of a
16 country's IP environment. Our nation's strong IP
17 system has helped America become the world leader
18 in bringing new technologies, life-saving drugs,
19 creative works and innovative new products to
20 consumers around the globe.

21 According to the U.S. Department of
22 Commerce, IP-intensive industries account for

1 over 38 percent of our nation's GDP, generate
2 over \$6 trillion in revenue, over 45 million
3 good-paying jobs in 81 different industries that
4 pay higher than the national average and account
5 for more than two-thirds of all our exports.
6 Clearly, these numbers are significant and we
7 must ensure that our strong IP system and
8 policies that help drive our economic success are
9 not weakened.

10 Recent court and administrative
11 rulings have created serious concerns amongst the
12 GIPC members. The jurisprudence related to
13 patentable subject matter is undermining the
14 U.S.'s global leadership, especially in
15 technology and biopharma industry sectors. It is
16 important that we acknowledge the negative
17 impacts of patentable subject matter
18 jurisprudence in the life sciences and
19 information technology sectors and effectively
20 respond to rulings that impact American
21 competitiveness and threaten American jobs.

22 In addition to some of the specific

1 examples I will cite, the overall impact of
2 recent rulings has been diminished clarity
3 regarding patent subject matter eligibility,
4 which results in confusion among patent-intensive
5 industry sectors, individual inventors and
6 innovators. While it is clear there are cases
7 where reasonable limitations may be and should be
8 placed on patent subject matter eligibility, such
9 as the fundamental building blocks of science,
10 abstract ideas and laws of nature, the scope of
11 that concern should be limited.

12 In the Alice v. CLS Bank and Mayo v.
13 Prometheus cases, as in subsequent cases since,
14 it is our members' belief that none of the patent
15 at issue involved the fundamental building blocks
16 of science. However, the courts went far beyond
17 this standard and, perhaps equally troubling,
18 declined to adequately describe what terms such
19 as abstract ideas and substantially more actually
20 more.

21 In the life sciences field, Ariosa v.
22 Sequenom, Judge Linn wrote that it is hard to

1 deny that Sequenom's invention is truly
2 meritorious but that the Federal Circuit was
3 bound by the sweeping language set out in Mayo,
4 basically inviting the Supreme Court to grant
5 cert, which they later declined to do, despite
6 the fact that Judge Linn recognized that the
7 invention was both meritorious and that the
8 invention was literally saving lives of pregnant
9 women. And under the Mayo standard, it was not
10 patentable.

11 The patent incentive that fuels
12 innovation in all of our economy works exactly
13 the same in fueling innovation in the life
14 sciences and information technologies. Denying
15 patent protection by carving out life sciences
16 and information technology is essentially
17 throwing the baby out with the bath water. As
18 Mark Andreessen famously observed, software is
19 eating the world and present and future
20 innovation in all field is enabled by information
21 technology or software. Denying patent
22 protection of software-related inventions does

1 not just impact the traditional software industry
2 but in fact impacts all industries.

3 The Chamber is not insensitive to
4 concerns regarding abuses of the patent system
5 and has previously responded to these concerns by
6 filing an amicus brief in *Symbol v. Lemelson* that
7 expressed great concerns with the impact of
8 patent abuse on our economy. But narrowing the
9 scope of patent-eligible subject matter is not
10 the way to address this problem. To remain
11 competitive, America must maintain a strong IP
12 system that does not discriminate against
13 specific industries and we must have clarity in
14 that system so that the life sciences and
15 information technology are eligible. Overly
16 narrowing the scope of patent-eligible subject
17 matter to exclude two of the most important areas
18 of American innovation is both counterproductive
19 and intellectually unsupportable.

20 If our nation does not have a strong
21 IP system, we run the risk of losing our position
22 as the world leader in innovation, as our

1 industries and inventors look elsewhere to
2 conduct their important research and production.

3 We applaud the U.S. Patent and
4 Trademark Office for providing this forum to
5 receive input from many stakeholders who are
6 impacted by this issue and it is imperative that
7 this process help provide guidance and clarity to
8 all those who depend on our patent system and
9 that the appropriate balance is achieved so that
10 American can continue to lead the world as the
11 most innovative and creative economic engine.

12 The U.S. Chamber of Commerce is
13 committed to working with your office and all
14 others interested in addressing this important
15 issue and we, once again, appreciate the
16 opportunity to provide comments today.

17 Thank you.

18 MS. NELSON: The next speaker is Mr.
19 Benjamin Jackson.

20 MR. JACKSON: Thank you. On behalf of
21 Myriad, I, again, thank the Patent Office for
22 this opportunity to speak on the subject of

1 subject matter eligibility. Second slide,
2 please.

3 These views are my own and not
4 necessarily those of Myriad, especially once I
5 get into the specifics of some of the language I
6 will talk about today. Next slide.

7 The Federal Register posed several
8 questions across the range of patent eligibility
9 and I wanted to just quickly direct the Office to
10 some written comments that were submitted by the
11 Coalition for 21st Century Medicine during the
12 past iterations of the guidance that addressed
13 some of the specific questions, meaning questions
14 7 through 13. I was one of the principal authors
15 on those written comments and I think if you go
16 on to the next slide, those comments do a decent
17 job of addressing preemption and very specific
18 questions on life science inventions. So, again,
19 I recommend those comments, those written
20 comments back to the Office. Next slide.

21 What I mainly wanted to talk about
22 today, though, are the questions addressing the

1 Federal Register questions 3 to 6. And this asks
2 about legislative action. And I think the last
3 roundtable and this one has shown that there are
4 concerns and there is pretty strong evidence of a
5 problem. I will note, in particular, that last
6 bullet about companies responding to the changed
7 landscape. I have got experience in talking to
8 individuals across the industry about companies
9 not pursuing certain technologies not because
10 there is a clinical risk of the product failing
11 or anything but now there is a new risk of not
12 being able to get a patent or moving towards
13 other types of protection, such as trade secret,
14 which I don't think is really where we want to go
15 in this area. Next slide.

16 And then the question is, what is the
17 root of the problem? These exceptions to
18 eligibility are entirely judicially created. It
19 is an invention, to use that word, one that
20 should have been rejected, frankly. There is no
21 basis in the statute. There is no requirement or
22 basis in the Constitution even. Next slide.

1 I really love this language from In re
2 Bergy. This was a decision by Judge Rich, where
3 he basically says that the only restraints were
4 the means by which Congress would promote the
5 arts and that Congress was given full freedom to
6 do so. Next slide.

7 So, what are the potential fixes? One
8 is a judicial solution. I think the Supreme
9 Court has shown that it is unwilling to, at least
10 for now, dive back into this area. The Sequenom
11 denial of cert was a big deal from that
12 perspective. Agency solution: What can the PTO
13 do to help? I think the guidance has done a
14 great job so far in helping in solving the
15 problem. I think the PTO can play a very
16 important role but, again, the PTO is, to some
17 extent, bound by the Supreme Court and the
18 Federal Circuit -- next slide -- which raises the
19 question of a legislative solution, ultimately
20 getting back to those Federal Register questions.

21 Here, I think the PTO does play an
22 important role. This forum is a great start.

1 But I pose the question how do you fix a statute
2 that is not broken. We talked about 101 being a
3 tool to get rid of bad patents but when you look
4 at the text of the statute, there is no
5 suggestion of anything like that, that this
6 section can be used to deny patentability. Next
7 slide.

8 A lot of proposals have been floating
9 around for legislative fixes. I will only
10 address two, and really only one in detail. Next
11 slide.

12 One thought has been just to eliminate
13 the exclusions entirely. There is a little bit
14 of superficial appeal here because it is pretty
15 simple. You could just write into the statute
16 and in the congressional history, note that we
17 are overturning all judicial exceptions. I think
18 this is not the best approach. I think, frankly,
19 we have moved past where this a palatable or a
20 practical solution. This is my opinion. I have
21 a little bit of experience dealing with unpopular
22 patents and the popular reaction to those. And I

1 just think that we have moved beyond that. Next
2 slide.

3 I think the better approach is to
4 enumerate specific exceptions to patent
5 eligibility. It is a lot more complicated to
6 draft. That is a problem you will have to deal
7 with building coalitions, pet issues, maybe
8 getting bogged down in certain areas. So, there
9 is an uphill climb but I, ultimately, think that
10 this is the better way to go. It brings clarity
11 and predictability and it deals with what I think
12 maybe is a problem of the judicial diversity that
13 we talked about earlier and it codifies specific
14 language that other judges will now have to
15 interpret, rather than sort of this amorphous
16 common law evolution with nothing tethered to any
17 specific language that can set down the rules and
18 then work with them. Next slide, please.

19 And I think we can learn from the
20 European approach, as mentioned in the Federal
21 Register. Next slide, please. In that approach,
22 everything is eligible by default and then there

1 are exclusions, specific exclusions. Now, in the
2 European approach, that list is expressly not
3 exhaustive. So, if we go to the next slide, I
4 would suggest that we Americanize that approach.
5 Again, everything is eligible by default but we
6 would make a list of ineligible things and make
7 that list exhaustive.

8 Here, again, I have just sort of
9 thrown out some language. This is just my brief
10 attempt and others can work on this on how to
11 change and make a Section 101(a) that sets forth
12 the general rubric of default eligibility and
13 then address ineligibility and other things
14 elsewhere. Next slide, please.

15 For example, we can have a 101(b),
16 which finally codifies the utility requirement.
17 And as long as we are cleaning out the closet,
18 let's get rid of these judicial ideas, judicially
19 created things. Next slide.

20 And so Section 101(c) can set forth
21 specific exceptions and those can be tailored to
22 whatever is appropriate, whatever Congress

1 decides really needs to be excluded. Next slide,
2 please.

3 Here, I have taken a swing at trying
4 to codify the judicial exceptions, themselves.
5 Romanette 1, a mental process. Romanettes 2 and
6 3, laws of nature, phenomenon of nature. You can
7 see that I struggled a little bit with the
8 language and I think we would have to work
9 through it but you get the idea. Let's just list
10 them out. Let's get it all on paper and give the
11 judges something they can work with. Next slide,
12 please.

13 Romanettes 4 and 5, products of
14 nature. This is a way that these things can be
15 treated. And again, there was a detailed
16 discussion of this in the Coalition for 21st
17 Century Medicine's written comments. Next slide.

18 We can even move on to things that we
19 have already sort of accepted as accepted from
20 patentability, such as human cloning and human
21 organisms.

22 I am out of time but you can see that

1 the idea is to set forth a framework in which we
2 can include or exclude certain types of subject
3 matter that we want to be out of the patent
4 system. Thank you.

5 MS. NELSON: Thank you, Mr. Jackson.

6 We will now move on to Konstantin
7 Linnik, please.

8 MR. LINNIK: Thank you. Good
9 afternoon. Thank you very much for this
10 opportunity. My name is Konstantin Linnik. I am
11 a partner with the law firm of Nutter McClennen
12 and Fish. I practice in the area of
13 biotechnology and pharmaceuticals law and
14 represent clients that are of various stages in
15 the development, individual entrepreneurs, as
16 well as large companies. If you could, advance
17 the slide to the next slide.

18 More recently, my firm, myself and a
19 couple of colleagues of mine represented a number
20 of industry associations, several of them listed
21 on this slide, in the amicus brief filings at the
22 Supreme Court asking for a petition for cert and,

1 before that, in asking the Federal Circuit to
2 hear the case en banc. This particular case, if
3 you look at the spectrum of industry support that
4 have gathered collectively, we represent that
5 U.K. Industry Association, which has hundreds of
6 various enterprises and European by Technology
7 Industry Associations, several national industry
8 associations, industry associations in Canada,
9 Australia, and Japan. And there is a pretty
10 broad consensus among thousands of companies that
11 the current state of the law is unacceptable.
12 Meritorious inventions are too often denied
13 protection and the outcomes across various
14 jurisdictions are inconsistent and unpredictable.
15 And the law, as it currently exists, is really
16 unworkable. Next slide.

17 So, the consensus position within the
18 industry, broadly, is that harmonized, clear, and
19 predictable intellectual property laws are
20 essential for the smooth functioning of the
21 economy in general and, particularly, biomedical
22 innovation and healthcare inventions, where

1 patent incentives are very important and billions
2 of dollars in investment are required to bring to
3 life health-saving, life-saving medicines. That
4 is where particular attention needs to be paid.

5 Next slide.

6 When Sequenom petitioned the Supreme
7 Court for cert, it was our hope that the Supreme
8 Court would take up the case and refine its
9 tests, particularly in view that Justice Breyer,
10 who seemed to be the mastermind behind the
11 jurisprudence of the Supreme Court has recently
12 published a book where he promoted the idea that
13 U.S. Supreme Court should be mindful of laws of
14 other jurisdictions and make sure that they work
15 in harmony with laws in other countries and
16 across the world.

17 So, when the petition was denied, it
18 was somewhat of a surprise to us, however, the
19 fact that Justice Breyer holds a view of this and
20 his position is actually somewhat promising for
21 what the intent of the court might be. Next
22 slide, please.

1 So, in our view, as has been mentioned
2 by several speakers before and I am sure will be
3 mentioned later, the Supreme Court has read into
4 the statute something that is not literally in
5 there. And if we were to rewrite Section 101
6 according to what Supreme Court tells us, we
7 probably would add to 101 the words something
8 like shown in the slide in red, where whoever
9 invents or discovers any new and useful process
10 or improvement thereof, is entitled to a patent,
11 provided that any such invention is significantly
12 more than an abstract idea, a law of nature, or a
13 natural phenomenon.

14 So, the significantly more part is
15 what has been the concern and the point of so
16 much discussion. It is pretty clear that our
17 understanding before the Supreme Court decisions
18 has been that laws of nature and natural
19 phenomenon or abstract ideas are not
20 patent-eligible. We thought it was pretty clear
21 how to distinguish these concepts from inventions
22 that are patentable. However, the fuzzy line of

1 significantly more turned out to be a lot more
2 difficult than we expected. Next slide.

3 So, what is interesting is that the
4 underlying policy rationale in these laws
5 actually is present in other jurisdictions as
6 well. And if you look at the European Patent
7 Convention, national laws of many industrialized
8 countries, you will find that discoveries,
9 scientific theories, mathematical methods, are
10 specifically excluded from patentability. There
11 is a reference to specific sections. You will
12 find the same concepts in common law
13 jurisdictions across the world. If you can,
14 advance to the next slide.

15 For example, in Australia, they except
16 from patent eligibility discoveries with no means
17 of putting them into effect, mere ideas on
18 scientific principles. Very similar concepts on
19 Japan. Despite all of these similarities in what
20 is meant to be not patent-eligible, the outcomes
21 in the U.S. and other jurisdictions are now
22 widely different.

1 If you go to the next slide, this is
2 an example from the Sequenom case. It is a good
3 example where you look at the U.S. claim and
4 compare it to European claim. You will find that
5 they are very similar and the same is true for
6 the Canadian claims, the Australian claims, and
7 somewhat Japanese claims. In the U.S., this
8 invention was found not patent-eligible and the
9 question has not even been ever brought up as an
10 issue in any other jurisdiction. This is not
11 unique to this particular case, even though this
12 case is a good example of discrepancies. Next
13 slide.

14 So, we are posing the question really
15 does the problem lie with the legal framework,
16 rather than the merits of specific inventions. I
17 will end on that. Thank you.

18 MS. NELSON: Thank you, Mr. Linnik.

19 And last, we will hear from Hans
20 Sauer.

21 MR. SAUER: Yes, and if the problem
22 lies with the legal framework, do we need to

1 change it?

2 So, good afternoon. I am Deputy
3 General Counsel for IP for the Biotechnology
4 Innovation Organization, on whose behalf I speak
5 today. But before I say anything, I do want to
6 thank the Patent Office for its sustained
7 outreach to the patent user community on the
8 topic of patent-eligible subject matter and, in
9 particular, I want to thank the Patent Office for
10 convening this roundtable which, in our view, for
11 the first time, focuses not on the implementation
12 of case law in examination guidance but on what
13 the right policy ought to be and on, perhaps, the
14 need for change.

15 It won't surprise you, given what you
16 have heard earlier, at least from the few life
17 sciences participants so far, that there hasn't
18 been an area of substantive patent law that has
19 received more discussion within Bio's membership
20 than the topic of patent-eligible subject matter.
21 Bio's members do view, I can only reiterate this,
22 the development of extra-statutory law in this

1 area as a significant departure from
2 internationally accepted norms of patentability
3 and that has negative implications for the
4 commercialization of innovative, industrial,
5 agricultural, and pharmaceutical products and
6 processes.

7 For example, inventive preparations
8 based on naturally-occurring substances have
9 historically been of great importance in
10 biotechnology. And innovation in this area has
11 been spurred, at least in part, historically, by
12 the availability of patent protection. This is
13 true for every sector of biotechnology. Examples
14 include vaccine antigens, crop protection
15 products, plant biotechnology, plant breeding,
16 industrial enzymes, immunosuppressive drugs,
17 anti-cancer compounds, and antibiotic substances.
18 Unfortunately, it is no longer news that such
19 promising naturally-derived compounds are no
20 longer patentable in the United States. As a
21 direct result of the Supreme Court's Myriad
22 decision, patent applications for antibiotics,

1 medicinal molecules, industrial enzymes and other
2 preparations that were first discovered or
3 derived from natural starting materials are being
4 rejected in the Office. And thousands of
5 existing patents have come under a cloud of
6 unpatentability and invalidity after large
7 investments have been made over decades, even if
8 the patented substances have nothing to do with
9 human genes or genetic diagnostic testing.

10 Other areas of continuing concern for
11 our members involve diagnostic or prognostic
12 methods. Biomarker-assisted methods of drug
13 treatment and other applications of personalized
14 medicine, as well as the commercial explanation
15 of the microbiomes of humans, animals, or plants.

16 District Court litigants continue to
17 make creative use of patent eligibility theories,
18 at least in the life sciences. And meanwhile,
19 courts, at least in the life sciences, have been
20 struggling to find the outer boundaries of the
21 Supreme Court's broad and sweeping
22 pronouncements. So, I can only echo what you

1 heard from Professor Lemley earlier, that perhaps
2 in some respects there may be a sense of
3 stabilizing case law in the software and
4 e-commerce area and there is not a similar sense
5 like that in the life sciences.

6 So, we do need a more stable solution
7 going forward. I think it is remarkable that
8 policymakers have, so far, been quiet or
9 completely absent from this debate. The law of
10 patent eligibility has been driven by the courts
11 alone. The USPTO has been concerned but
12 primarily with implementation. The Department of
13 Justice has opined formalistically on the correct
14 legal interpretation of Supreme Court precedent
15 but the U.S. Government's views, the U.S.
16 Government's policy views on the matter are
17 unknown. Throughout, Congress has focused on
18 other areas of patent policy. So, we hope, Bio
19 hopes, that today's roundtable is the opening of
20 a more robust dialogue with elected government
21 outside the forum of the courts.

22 So, to this end, Bio members have made

1 the following observations and recommendations.
2 First, we believe congressional involvement is
3 necessary. It is not just appropriate. It is
4 necessary. The question of what can and cannot
5 even be considered for patenting is a fundamental
6 question of substantive patent law. This not
7 filling in gaps in the law. It is not regulating
8 around the margins. It is not the kind of thing
9 better left for the courts or better left to
10 agencies. Congress should own this question.

11 Second, we are having a huge debate
12 that other industrialized countries simply don't
13 have. To the extent that contours of patentable
14 subject matter needed to be defined in other
15 countries, it was done legislatively.
16 Internationally accepted standards can guide us,
17 too.

18 Third, we probably can't turn back the
19 clock. The Supreme Court's underlying concerns
20 deserve to be addressed. If assurance is needed
21 that patents do not withdraw the building blocks
22 of basic research from the public domain, that,

1 too, is appropriate for Congress to consider. I
2 refer back to more than a decade ago. Many of
3 you have followed legislative developments for a
4 long time. So, you will recall that more than
5 ten years ago, we already had a robust
6 conversation about, for example, an experimental
7 use exemption, under which there would be no
8 liability for patent infringement. If somebody
9 were to experiment on a patented invention to see
10 if it can be made the way the patent owner says
11 it does, to see if it works the way the patent
12 owner says it does, to discover something new
13 about it, maybe to improve it, maybe to design
14 around it. That conversation was never
15 concluded.

16 And fourth, the Supreme Court's
17 two-part test should be abrogated. In its place,
18 Congress should reaffirm patent laws' traditional
19 boundaries between practical applications of
20 scientific knowledge in all fields of technology,
21 as contrasted with other manifestations of human
22 creativity that are not themselves technological.

1 Other countries have been able to do this. They
2 have developed not just case law but workable
3 tests. So, why not be guided by experience in
4 other countries who haven't run into the same
5 problems we have?

6 Biotechnology is a field the United
7 States have created and led. Yet, patent
8 protection and our technology has become less
9 certain and is today less available than in other
10 countries with which the United States compete.
11 There are biotechnologies -- I am waiting for the
12 beep and then it is going to take five more
13 seconds.

14 There are biotechnologies for which it
15 is now easier to get patent protection in China
16 and in Europe than it is in the United States.
17 When U.S. companies want to compete in these
18 foreign markets, they will face patents like they
19 always have. But when foreign countries come
20 here, companies come here to compete in the U.S.
21 market, they will have a free for all and they
22 will not face patents. We ought to have a

1 conversation about whether that is the right
2 recipe for U.S. competitiveness and domestic job
3 growth.

4 We look forward to a good dialogue on
5 the matter. Thank you very much.

6 MS. NELSON: Thank you, Mr. Sauer.

7 I would like to start out -- I know
8 you, all of the panelists, have been focused on
9 the need for a legislative fix but I first want
10 to start out with just sort of asking to what
11 extent -- and we have noticed and there is
12 evidence to sort of suggest filings have started
13 to remain consistent in the life science area.
14 And I am just wondering to what extent certain
15 technologies are amenable to workarounds. And I
16 give you as an example, isolated DNAs that are
17 then put in a vector to make a transgenic animal
18 or something, where a claimed drafting could get
19 you to something that is essentially what you
20 want to protect anyway and you could forego the
21 claim to an isolated DNA.

22 And I am just wondering if there are

1 particular technologies where the workarounds are
2 working. In particular, let's focus on natural
3 products and then if there are particular areas
4 where that just is not an option at all.

5 MR. JACKSON: I can speak a little bit
6 to that. I think to some extent, at least in my
7 personal experience in talking to other members
8 of the Coalition for 21st Century Medicine, which
9 is mainly diagnostic companies, is there has been
10 an approach of adding limitations to the claims
11 in order to get the patents issued, limitations
12 that would not have been required five years'
13 ago, and limitations that, frankly, should not be
14 required. And so those applications are still
15 being filed. The claims are being presented and,
16 in some cases, the patents are increasingly being
17 issued but in a far narrower state than they
18 would have been before and I think in a far
19 narrower state than they should be. That is my
20 experience.

21 MS. NELSON: And when you say not
22 required, can you sort of clarify what you mean

1 about putting limitations in that are not
2 required, that you don't think should be
3 required?

4 MR. JACKSON: In the case of a
5 diagnostic, a molecular diagnostic, instead of
6 simply setting forth all the ten biomarkers that
7 are in your test, an examiner may require that
8 you set forth the specific algorithm in which
9 those biomarkers are combined and get the score
10 and even beyond that, the performance of the
11 score, what its positive and negative predictive
12 value must be. The examiners start to layer on
13 requirements of specificity such that you get
14 down to a level that, ultimately, may be a patent
15 that is not really worth having, frankly.

16 MR. CABECA: That is interesting. I
17 have actually heard the opposite anecdotally as
18 well where you are just removing the diagnostic
19 aspects actually gives you a broader claim that
20 gets through the eligibility test, which is kind
21 of interesting itself.

22 MR. LINNIK: Which is in the examples

1 that the Patent Office provided most recently in
2 May, where you have a method of detecting a
3 molecule in a sample that is perfectly
4 patentable. And as long as you add a step to
5 this claim that the step of diagnosing a patient,
6 it become patent-ineligible, which is very
7 difficult to reconcile rationally. It certainly
8 is a way to draft around Mayo v. Prometheus. I'm
9 not sure what the ultimate value of those claims
10 would be.

11 MS. NELSON: With diagnostics, is
12 there ever the opportunity to put in something
13 that is, I guess, sort of technological that
14 would sort of get you past the correlation and
15 into something that is more amenable to patent
16 eligibility?

17 MR. SAUER: Let me first give it a
18 crack and then Ben probably has some observations
19 on that as well.

20 If there is no implementation step, if
21 you will, of any kind in the claim, but I do
22 think these claims have always been viewed with

1 some skepticism, so merely comparing information
2 and then drawing a conclusion is a claim that
3 probably, under the way we today understand
4 Section 112 and so on might be vulnerable under
5 other theories of invalidity as well.

6 What I hear much more often from Bio's
7 members, though, is like your claim to a typical
8 laundry detergent enzyme or another preparation,
9 claims like that run into problems in the Patent
10 Office and if patent protections can be had, if
11 it all, it can be had only at great cost of claim
12 scope.

13 So, I know one Bio member to whom I
14 talked about this who said well, I couldn't get a
15 claim to a laundry detergent enzyme but I could
16 get a claim to a method of washing laundry in a
17 washing machine using a washing liqueur that
18 contains the enzyme. And those patents can be
19 procured. I do think applicants take the patent.
20 They report up to management that a patent was
21 procured and the objection might even be reported
22 as having been overcome. But at the end of the

1 day, everyone understands that claim scope is
2 vastly different under these circumstances and
3 has very different commercial applications.

4 MR. JACKSON: If I could just jump in
5 there. Another point I think to your question is
6 that at least within the molecular diagnostics
7 industry, there are tool and kit and equipment
8 manufacturers, and then there are those who work
9 with the diagnostics themselves. I think of it
10 is sort of platform makers and content makers.
11 And so on the question of new chemistry that can
12 be used to detect a molecule or new machines that
13 can be used to implement that chemistry, those
14 are done by a certain group of companies, the
15 tool makers. And they probably have a
16 rip-roaring time at the Patent Office. I don't
17 know. I am sure they are getting their patents
18 through just fine. It is the content makers
19 that, in my experience, who are really
20 struggling, those who take those platforms and
21 implement them in a very specific way to detect a
22 new cancer or prognose a cancer using specific

1 biomarkers. They don't necessarily invent a new
2 chemistry but they implement that chemistry in
3 now a new way that is very useful from a
4 diagnostic perspective.

5 And I think it is very important that
6 both of those camps within the molecular
7 diagnostic industry receive ample protection and
8 investment.

9 MR. KELLY: So, I have a quick
10 question for Mr. Cullen. This was provided by
11 someone from the audience. So, your perspective
12 is different from a lot of people we have heard
13 from today coming from the Chamber of Commerce.
14 And the points that you raised were largely in
15 support of patentability and that we need to
16 clear up the confusion that we have. But the
17 questioner asks how do you square that with the
18 commentary from somebody like we heard from
19 earlier from J.C. Penney, which is that, as a
20 functioning company, they are basically being
21 hindered by a lot of patents in the marketplace
22 right now. How do you speak to that from sort of

1 your Chamber of Commerce point of view?

2 MR. CULLEN: So, I think that is a
3 very important question. And as I mentioned in
4 my comments, we are certainly sensitive to the
5 issue of abuse. We recognize it occurs. We also
6 recognize that there has to be some kind of a
7 thoughtful discussion about how to curb that type
8 of abuse.

9 Our fundamental concern, though, is
10 that the confusion regarding eligibility is one
11 that also provides ripeness for abuse. So, when
12 you solve the problem and you provide more
13 clarity, then we think some of these problems
14 will, perhaps, go away, to some extent. But
15 absolutely, the Chamber members, particularly,
16 our retailers and, indeed, some of our tech
17 members are friends from Amazon. A good example,
18 there were victims of these types of abuses.
19 That is a serious problem.

20 So, the Chamber does not look at this
21 as just simply an either/or. We think you have
22 to really address both. And from our

1 perspective, there is probably a reasonable
2 legislative path forward, particularly when it
3 comes to the issue of some patent reform.

4 When it comes to specific issues
5 legislatively on the issue of eligibility, we
6 have not yet taken a position on whether or not
7 congressional involvement is the only way to go
8 there. We would like to see what the language
9 is. The Chamber is very careful before it takes
10 a position on legislation. So, we think that
11 there is probably good work to be done. More
12 clarity from the Courts would be helpful but,
13 again, it is also something that, at the PTO
14 having the necessary resources and the expertise
15 to do a better job of patent examination.

16 Although a very good job is being done, we think
17 that is an area that may also benefit from USPTO
18 just simply having the resources they need.

19 So, from our perspective, we think
20 that these are not issues you look at completely
21 separately. They are all part of the problem.

22 MR. SAUER: If I could briefly add to

1 that because this often comes up in the
2 legislative debate as well. And many of my
3 members keep asking if there are abuses in the
4 system or systemic problems with too many patents
5 or if there is something wrong about the way we
6 enforce and litigate patents, we query whether
7 the right answer to that should be to crank up
8 the exceptions. Because I do think the same
9 problems would persist even if no patent would
10 suffer from a Section 101 problem in the whole of
11 the United States. We would still be having the
12 same debate in Congress.

13 MR. KELLY: Well, and that sort of
14 leads me to my follow-up question, which I did
15 want to direct to you and the life sciences
16 people, which is that when I hear or when we hear
17 discussions on what I will call the abstract idea
18 exception side of the debate, those commentators
19 usually say something along the lines of there is
20 a lot of patents out there that need to be dealt
21 with but the way the Section 101 jurisprudence
22 has evolved, you are not really dealing with them

1 correctly. You are maybe overcorrecting or
2 under-correcting. The problem is how do you fix
3 the test to get rid of the patents that those
4 people think should not have issued.

5 But on the life sciences side, is the
6 debate different? Is there a general agreement
7 that there are a lot of patents that issued in
8 the space that shouldn't have and so the test
9 needs to be fixed? Or is it just how do we get
10 rid of the tests that are out there and dial back
11 the exceptions as they apply to our field? Maybe
12 that is too blunt a question.

13 MR. SAUER: No, I am trying to
14 compartmentalize it in ways that allows me to
15 easily answer it.

16 So, what I certainly don't hear from
17 Bio's membership are complaints that there are
18 too many patents out there that cover a patent-
19 ineligible subject matter. You know that is not
20 a concern I hear.

21 There are, of course, there is an
22 understanding of the needs of other industries

1 for whom the patent system might work differently
2 and that affects the way we advocate, for
3 example, to Congress in the context of patent
4 litigation reform, which is where Congress has
5 focused.

6 I do think there is a sense within
7 Bio's membership that queries whether the
8 exceptions, as they have been articulated, are
9 even needed in the patent system as we have it.
10 We are caught in a rut where we tried to define
11 what an abstract idea is, what a natural
12 phenomenon is. And there is the sense that maybe
13 if we could define it well enough, then all our
14 problems would go away.

15 What might be helpful would be to ask
16 do we need these exceptions at all? If we
17 refocus the patent system on what it
18 traditionally always was understood to do, and
19 that is it works for technology and it doesn't
20 work for aesthetic creations or other
21 manifestations of human creativity, maybe if
22 Congress did that, the need for the exceptions

1 would go away because the constitutional mandate
2 that we have to follow and the patent laws would
3 be advanced much more affirmatively, rather than
4 trying to define the scope of what is not
5 patent-eligible.

6 Other countries have done it quite
7 that way. And in TRIPS, in fact, the United
8 States signed on to the notion that patents
9 should be available in all fields of technology,
10 not art, not social innovations, and other areas.

11 MR. HANNON: I have one question. So,
12 one theme that emerged from this panel, I think,
13 if not in earlier panels, was the importance of
14 our domestic framework in relation to the
15 international global marketplace. And I will
16 direct this to you, Mr. Linnik, to what extent
17 should these international examples serve as
18 useful guideposts for our own eligibility
19 discussions?

20 MR. LINNIK: I think they are highly
21 informative. And as proposed by many,
22 specifically the European framework seems to be

1 working just fine and, at least in the area of
2 biotechnology and pharmaceuticals, have produced
3 consistent results, and results that have been
4 reliable and predictable.

5 I think one downside for having an
6 inconsistent framework, particularly in the area
7 of healthcare and life sciences, is if you have
8 patents available outside of the U.S., you need
9 to disclose your invention in order to obtain
10 those patents, which essentially means there is
11 no way of maintaining trade secret related to
12 those inventions; which then means there is no
13 practical protection across the world, if you are
14 not able to get full patent protection or trade
15 secret for your inventions; which we think would
16 ultimately mean lower investment or no investment
17 in where we need it most.

18 MS. NELSON: I have a question for Mr.
19 Cullen or possibly for all the panelists. So, it
20 seems that a lot of the problem, and you speak to
21 the idea of wanting to have -- to not
22 discriminate between industries and there seems

1 to be a lot of effort to try to come up with a
2 one-size-fits-all approach. And yet at the same
3 time, we hear that the needs of the life sciences
4 are very different from software or other
5 technologies.

6 Is there something we should be
7 considering as maybe not a one-size-fits-all? I
8 mean should we be bifurcating different
9 technologies and making the patent system work
10 the way it needs to work for each area of
11 technology?

12 MR. CULLEN: You know, that is a tough
13 question. I certainly think that trying to fine
14 tune it too much may become a little bit
15 dangerous. But I would have to defer to some of
16 my more technically expert fellow panelists on
17 that because I really just don't know the answer
18 off the top of my head. But I would be concerned
19 about trying to get too specific in this area
20 just simply because you don't know what is going
21 to come up in the future. There is so much
22 innovation that occurs that if you are being too

1 prescriptive that there is the opportunity you
2 may, at some point in time, exclude some future
3 innovation simply because you have not had the
4 opportunity to see it. So, I would be somewhat
5 concerned about that. But, again, I have talked
6 a lot about the need for specificity. And so
7 there are some benefits. But I just really don't
8 have a good answer for you.

9 MR. JACKSON: I have thought a lot
10 about that and, at the outset, that has a certain
11 level of appeal because I think there are pretty
12 dramatic differences between industries in terms
13 of investment required, lead times for
14 development, and life cycle of products. In
15 internet or like a smart phone app might have
16 life cycle of a year or two, if it is really
17 successful. A drug or a diagnostic could have a
18 life cycle of 10 or 15 years. And along those
19 same lines, it might take three months to develop
20 that app, it will take five or ten years to
21 develop that drug or diagnostic.

22 But then at the same time -- so, that

1 might say maybe software could be treated
2 differently. At the same time, if you are moving
3 out of a smart phone app toward something like
4 enterprise software or things like that, I think
5 you are talking about much larger degrees of
6 investment and development time and, ultimately
7 life cycle, such that they start to look a little
8 bit more like a drug from those perspectives.
9 But I don't know that you could broadly brush
10 everything as software versus life sciences.

11 I don't know if that is very helpful
12 but those are some thoughts.

13 MS. NELSON: So in terms of a
14 legislative proposal, do you think it makes more
15 sense to try -- or both options, to try to put
16 the judicial exceptions and draft them the way it
17 makes sense into the statute or to sort of leave
18 everything in and carve out sort of exclusions or
19 both? Like I guess I am envisioning maybe
20 ethical exclusions or things like that, if that
21 is the concern of the Supreme Court in the life
22 science world. Does that seem like a better

1 approach or to try to actually come up with
2 language that defines the reach of the judicial
3 exceptions?

4 MR. SAUER: So, I have heard two basic
5 approaches to this. And this is now not Bio
6 talking. It is more what I have heard in talking
7 to colleagues and practitioners. One way would
8 be yes, just go the exclusion route and define
9 them more carefully, write out a list of things
10 that you just don't think ought to be within the
11 scope of patent law. And maybe with a lot of
12 effort, one can come up with an exhaustive list.

13 The other approach that I have also
14 heard described is get rid of the exclusions and
15 define for the first time in patent law the scope
16 of the useful arts that Congress, you know back
17 then actually the Constitution, wanted to
18 protect. Like what does it even mean to like
19 protect the useful arts?

20 The Patent Act doesn't describe what
21 that is. It describes that the arts have to be
22 useful, inventions have to be useful but not the

1 universe of patentable things. So, for example,
2 a painting could be described as an article of
3 manufacture but everybody understands it is an
4 aesthetic creation and that is not within the
5 purview of patent law. But in other respects,
6 the Patent Act never said patents are only
7 available for technological inventions, if you
8 will, not aesthetic inventions or social
9 innovations.

10 You know this is not Bio's view but it
11 is a view I have heard expressed what if Congress
12 came in and enacted a substitute statement in
13 lieu of the exception staying patents are
14 available for inventions in all fields of
15 technology and underline that and say that is
16 where we mean, a kin to what we do for covered
17 business method patent review, where the Patent
18 Office already has to make a decision whether a
19 patent is for a technological invention, sort of,
20 or not. Maybe there is even precedent already
21 where the Patent Office has been trying to define
22 whether it is a patent for a technology or for

1 some other manifestation of human creativity.

2 And then maybe that could be paired to
3 address specific concerns that the Supreme Court
4 might have had with the building blocks of human
5 knowledge and like and we could revisit the
6 national academy's recommendations for how to
7 craft maybe a research use exemption that would
8 give people more comfort that patents will never
9 interfere with basic knowledge creation and
10 follow-on innovation.

11 So, these are two approaches that I
12 have heard. Now, Konstantin I think was very
13 sophisticated in examining how other patent
14 systems have done it and they do all have lists
15 of exclusions. Even though they also say they
16 only give patents to technology, they follow-up
17 with things that they specifically exclude.

18 MR. LINNIK: Regardless of the
19 approach, one thing I want to point out is that
20 Myriad case, the question that the Supreme Court
21 was answering was are human genes patentable.
22 And the answer to that question is no. And I

1 think the majority agrees of course not. So,
2 that was the wrong question. However, no matter
3 what amendments we make to 101 or any other
4 section, I don't think we need to revisit that
5 issue. And in fact, we may want to codify that
6 human genes are in fact not patentable, period.

7 MR. KELLY: You know we just had a
8 question come up that I have thought of before.
9 When I learned patent law a long time ago, I had
10 a professor say that Title 35 was basically the
11 Patent Law enabling act. It was a common law
12 enabling act, in that the patent law in the
13 United States would evolve through judicial
14 decisions. And that is very much like how 101
15 has been interpreted. Section 101 is sort of
16 like the Sherman Act form the antitrust world, in
17 the sense that it is just very broad. It is very
18 simple and it has sort of lived and breathed
19 through judicial decisions. And that has led us
20 to a bit of a problem.

21 And if we go the legislative route
22 change, are we creating a different problem,

1 which is that now, if we are going to legislate
2 in and hard wire in everything today that we want
3 to do, how are we going to fix that two years
4 from now? Because as I think everybody is aware,
5 legislation is difficult to come by in this
6 space. And so if we legislate a fix, are we
7 creating a whole new problem that will be even
8 more difficult to overcome?

9 MR. LINNIK: It is hard to imagine how
10 much worse it can get for life sciences. So,
11 from that perspective, I don't think there is a
12 danger in doing that.

13 MR. JACKSON: Yes, and there is the
14 classic saw of the devil you know and the devil
15 that you don't is right now we have got judges
16 just sort of making whatever decision seems to
17 make sense to them. And again, these decisions
18 are not tied to any specific statutory language.
19 I think that a statutory framework or amendment
20 could then be fleshed out by the courts, I think
21 appropriately so. I think that was the intention
22 of Title 35 was that there be some framework to

1 work within. But the exceptions are currently
2 working without any framework. They are
3 untethered to any specific language or provision
4 of the statute. They were literally invented by
5 the courts with no basis in the statute of the
6 Constitution. And I think at least fixing that
7 is a step forward.

8 Now, you are right, it is going to be
9 difficult. I mean even within my slides if you
10 saw, once I got to the question of like human
11 cloning and germline editing of the human
12 germline, that starts to get pretty sticky and
13 those are ethical considerations. Maybe we say
14 that we are not going to touch those yet. So, to
15 some extent, Section 33(a) of the AIA already
16 addressed human organisms not being patentable.
17 So, we have already started down that road a
18 little bit. Let's explore it a little bit more.
19 That is my opinion.

20 MR. CULLEN: I would just simply point
21 out from the Chamber perspective, you know we
22 would have to see it first. You know we

1 certainly recognize that there is a serious
2 problem that needs some clarity, it needs to be
3 fixed, but we are just not there yet in terms of
4 having either the prescription that we would like
5 to recommend to Members of Congress in terms of
6 what all the components would be and also the
7 danger that whenever you go down a legislative
8 path, you really never know what you are going to
9 get until you finish that process.

10 And so it may create other unintended
11 consequences or it may have limitations that
12 don't adequately solve the problem. So, you
13 might only get one bite out of that apple. So, I
14 think we need to be careful.

15 MR. KELLY: So, I have one more
16 follow-up and this is just me talking. But
17 another solution to some of this is a regulatory
18 solution. That is, a statute that provides that
19 through regulation, through notice and comment
20 rulemaking, the Agency will devise the contours
21 of eligibility moving forward. I'm just
22 wondering if anybody has ever thought of that

1 possible solution and whether it is the kind of
2 thing that makes sense.

3 MR. LINNIK: So, there is parts
4 protection, data protection, and exclusivity
5 based on submission to the FDA, 5 years for small
6 molecules and 12 years for biologics, which is
7 supplementary to and independent of patent
8 protection. So, it is a separate sui generis
9 system for the pharmaceutical industry.

10 While it is a good system and a good
11 backup, what it doesn't accomplish, it doesn't
12 incentivize early stage innovation where multiple
13 players can contribute to the innovation, which
14 is what the patent system does. Multiple
15 independent players can innovate and share and
16 disclose information to each other while
17 benefitting from their innovation. And that is
18 why we would see so much cross-licensing down the
19 line.

20 MS. NELSON: I just have one more
21 quick question and then we will stop for lunch.
22 And that is, I know, Mr. Cullen, you had talked

1 about trade secrets and I have heard that
2 frequently, that life science community is moving
3 towards trade secrets and I was just wondering
4 whether that is really a viable option in the
5 life science space. Or are most things, these
6 days, can be reverse engineered, so that is not
7 really going to serve any useful function?

8 MR. JACKSON: I have a thought on
9 that. I think, to the extent possible, a lot of
10 companies and innovators are moving toward trade
11 secrets. There are important limitations,
12 though, on the availability of trade secrets in
13 our industry both for drugs and for diagnostics
14 because of the requirement of publishing a lot of
15 details of your test in order to get
16 reimbursement in the case of diagnostics or to
17 get regulatory approval in the case of drugs.

18 So, a trade secret doesn't provide a
19 lot of protection. But what little there is,
20 people are shifting that way.

21 MR. CULLEN: Yes, I would just point
22 out from our members' perspective, trade secrets

1 become an increasingly important part of the
2 portfolio. You know everything starts out as a
3 trade secret and, ultimately, the question of
4 patent eligibility becomes a very serious
5 consideration for those folks in terms of what is
6 going to work best in terms of their portfolios.

7 But we have seen a trend in commentary
8 from our members that trade secrets are
9 increasingly important to them. So, I just think
10 that patents still play that traditional role.
11 And so we want to make sure as much clarity can
12 be achieved in the marketplace.

13 MS. NELSON: Thank you very much. And
14 with that, we will close the session and have an
15 hour for lunch.

16 (Whereupon, the above-entitled matter
17 went off the record at 12:51 p.m. and resumed at
18 1:55 p.m.)

19 MR. KRAUSE: I think I'm the only
20 person up here who has not been introduced. My
21 name is Tom Krause. I'm the Deputy Solicitor at
22 the PTO.

1 And I will be your moderator for this
2 panel. And I think we can just get started right
3 away with Jason Gardner.

4 MR. GARDNER: Great. So, thank you.
5 First I just want to thank my distinguished
6 panelists for joining me. This is actually a
7 great opportunity for Marqeta.

8 This is something we've actually been
9 talking about for some time. The company is
10 close to six years old. And we're actually very
11 grateful for the U.S. PTO to give companies like
12 Marqeta the opportunity.

13 We're a small technology company based
14 out of Oakland. About 80 people. We work within
15 the financial services space.

16 So, the ecosystem is made up of four
17 primary players. And one of them is what we
18 built, which is issuing and processing.

19 So, I'm sure all of you have debit or
20 credit cards in your wallet. They have 16 digits
21 on them, if they're Visa and MasterCard. Those
22 16 digits, think of it as like an IP Address.

1 So when that card is swiped, tapped,
2 entered online, whether you're buying something
3 at Whole Foods or Amazon, that -- those 16 digits
4 correspond with a company like us. It literally
5 routes to us. And we make a decision of whether
6 to authorize that transaction or not.

7 So, we're actually a very important
8 and significant part of the payment card
9 ecosystem.

10 We also are inventors. So we have a
11 lot of firsts in what we do. And we have four
12 patents in process and have been in process for
13 some time.

14 You know, Alice, the Alice ruling has
15 certainly affected us in a way where, you know,
16 we're not -- I know there's a -- there's been
17 some word of -- we haven't used the word patent
18 troll. So I'm going to be the first company to
19 use it.

20 We've never been on the receiving end
21 of that. Ultimately, the Alice decision was to
22 keep that from happening. To keep companies that

1 actually don't have a business plan and to
2 actually implement technology.

3 But companies like Marqeta do. We
4 actually -- we create the technology. We
5 implement the technology and it's up and running
6 today.

7 Several of the inventions that we made
8 are first within our industry. We don't have,
9 you know, the wherewithal actually, whenever we
10 have considered, we have considered going after a
11 company for infringing on our patents, it's
12 really pretty much the last thing we want to do.

13 And but at the same time we have a
14 competitive nature. We have investors. And
15 really what we want to do is protect our IP. And
16 obviously patents is one of the ways to do that.

17 And Alice has certainly affected us in
18 a way that keeps us from protecting that IP.

19 MR. KRAUSE: Okay. Thank you, Mr.
20 Gardner Allen Lo from Google?

21 MR. LO: Thank you. Let me first
22 thank and commend the U.S. PTO for holding this

1 roundtable. And creating the forum for us to be
2 able to discuss this important topic of subject
3 matter eligibility of software patents under
4 Section 101.

5 My name is Allen Lo. I'm Deputy
6 General Counsel of Patents at Google.

7 My team is responsible for building
8 the patent portfolio to protect many of the
9 groundbreaking software innovations that Google
10 engineers make each year, based on the literally
11 billions of dollars of R&D investment that we
12 make.

13 Over the past decade, Google has built
14 a significant portfolio. Now over 50 thousand
15 patent assets primarily concentrated in the
16 software field.

17 And because of that, we have a
18 significant stake in the outcome of Alice and
19 other decisions applying a subsection matter
20 eligibility standard.

21 And because of that, we've given
22 significant thought to the impact that this

1 decision has had. And we also look forward to
2 providing you written comments following the
3 roundtable.

4 First thing I would say about Alice,
5 and this really goes to sort of the general
6 commentary that's been out there around it.
7 Which is that contrary to what many have said and
8 claimed, Alice was not the death nail of all
9 software patents or the blow to innovation in the
10 software industry that some have said.

11 As a company in the software space,
12 Google continues to invest heavily in software
13 innovation, as well as file patents on those
14 innovations. The rejections that we've seen from
15 the Patent Office and the decisions of the
16 Court's invalidating claims under Section 101
17 have largely been concentrated in areas that we
18 would describe as primarily business methods
19 implementing conventional computer techniques.

20 Many important and vital areas of
21 software R&D and patenting remain largely
22 untouched. Because they've always been viewed

1 and described as technological advances in
2 computer technology.

3 Such areas include computer security,
4 video compression, and cloud computing. Just to
5 name a few.

6 So, in our view, as far as our
7 portfolio is concerned, Alice only touched a
8 small, relatively small subset of our portfolio.
9 Instead, Alice -- we view Alice as really -- and
10 the development of the law that followed Alice,
11 as a needed course correction.

12 The constitutionally mandated goal of
13 the patent system is to promote the progress of
14 the useful arts. We understand this to mean to
15 encouraging investment and development in
16 technology.

17 Before Alice, too many patents were
18 issued on claims like those in Alice, to abstract
19 concepts or functions performed on a computer on
20 the internet. Such patents often claimed a
21 desired result, but provided no explanation or
22 limitation of how to achieve that result using

1 advances in computer technology.

2 These kinds of patents have become the
3 source of many litigations targeting software
4 companies. Whether it's large companies, small
5 companies, resulting in resources being diverted
6 from software innovation to having to defend
7 spurious litigation.

8 We think it's important for the
9 Supreme Court to clarify that these kinds of
10 patents should not be allowed. Applicants were
11 basically obtaining patents based on no technical
12 contribution and little disclosure to the public
13 that they could then use to tax real innovation
14 and real innovators that did the hard work of
15 finding the technical solutions necessary to
16 bringing valuable products to market.

17 The Supreme Court's Alice decision
18 reminds us that it is not sufficient, nor should
19 it be, to elevate form over substance by finding
20 patent eligibility based on the mere recitation
21 of generic computer components.

22 The analysis must now consider whether

1 the claimed invention is directed to
2 technological advance in computer technology.
3 And to be sure, Alice was a difficult opinion in
4 many ways.

5 It created initial uncertainty by
6 focusing on a test for what is not -- what is
7 ineligible subject matter. And leaving details
8 to the lower courts to work out a test for what
9 is eligible subject matter.

10 But over the past two and a half years
11 since Alice was published, the emerging case law
12 is now filling in those details. We now see the
13 Federal Circuit in cases like Enfish, Bascom, and
14 McRO, examining whether a claim recites a
15 technical solution to a technical problem to
16 overcome the assertion that a claim is otherwise
17 directed to an abstract idea.

18 We believe this is the right question
19 to be focusing on when considering whether a
20 software claim recites patent-eligible subject
21 matter. The technical problem solution test
22 ensures that the patents protect advancements in

1 technology, not some other field, and thereby
2 promotes progress of the useful arts.

3 The test promotes innovation in the
4 software industry by rewarding concrete
5 advancements in computer technology rather than a
6 statement of vague results with little
7 information about how the results should be
8 achieved.

9 As the Federal Circuit issues more
10 decision applying a technical problem/technical
11 solution approach, the line between patent-
12 eligible and patent-ineligible software claims
13 will become more and predictable.

14 This is the nature of the common law
15 process on which our legal system is built. And
16 we would want to allow the courts more time to
17 work this out.

18 In terms of how Alice and the standard
19 applies to Google, we have found that when we
20 draft applications and claims to clearly explain
21 how the invention provides a technical solution
22 to a technical problem, we draft higher quality

1 applications that have a better success, better
2 chance of success at the U.S. PTO, and in other
3 foreign Patent Offices as well.

4 These applications explain the
5 technical advance of the invention in more
6 detail. They provide more information to the
7 public. And the scope of the resulting claims
8 are more clear.

9 Like many companies, we are building
10 a global portfolio. We file patents in the U.S.
11 as well as outside. And we view it as a hugely
12 positive development that the question of
13 software eligible is now converging across
14 multiple jurisdictions around this question of
15 whether a claim recites a technical contribution.

16 In conclusion, we'd like to see the
17 case law, whether at the Federal Circuit, or at
18 the PTAB, applying Section 101 to software
19 patents to continue to develop with a focus on
20 whether the claims recite a technical solution to
21 a technical problem.

22 With these developments underway --

1 oh, and we also encourage the U.S. PTO to
2 instruct examiners to apply the same test to
3 claims in an application, as also being fully
4 supported by the current case law.

5 With these developments underway, we
6 see no need for action by Congress at this time
7 to address patent eligibility of software claims
8 and potentially risk creating more uncertainty
9 and disruption in this space.

10 MR. KRAUSE: Okay. Thank you, Mr. Lo.
11 Next we have Daniel Nazer, Electronic Frontier
12 Foundation.

13 MR. NAZER: Thank you. My name is
14 Daniel Nazer. I'm from EFF. Thanks to the
15 Patent Office for having us here.

16 I always appreciate that even though
17 EFF is -- its membership and its views are not
18 always aligned with the Patent Office, we always
19 get a very respectful hearing. And I really
20 appreciate that.

21 We have about 27 thousand paying
22 members. Most -- at least a plurality would be

1 working in tech. A lot in this area. And a lot
2 of our members write software for a living.

3 And we hear from our members pretty
4 regularly about our patent work. And the
5 feedback I get as the sort of chair on patents
6 there is that -- is that we're too
7 accommodationists. And that Alice doesn't go far
8 enough. And that the rules should be no software
9 patents.

10 I'm not so naive that I expect the
11 Patent Office to make legislative recommendations
12 to the Congress along those lines. But, I do
13 think it is important that it's exposed to those
14 views and those communities that are the people
15 that write software for a living that are saying
16 this.

17 And that particularly in the free
18 software community, there's a very significant
19 population of people who are the creators and
20 inventors in this field. That feel that patents
21 are an imposition on them and slow down their
22 ability to create.

1 But, if you read my briefing matters,
2 then it doesn't say that EFF members get to say
3 what the law is. It says that the Supreme Court
4 gets to say what the law is.

5 So, we live in Alice v. CLS Bank
6 world. And we do think it is a significant
7 improvement on the -- before the status quo. And
8 that it was a significant change.

9 And I think it's also -- I agree with
10 a lot of what other people are saying. That the
11 question here, particularly for this event, is
12 the big picture is Alice beneficial or harmful?

13 And the question of course is not just
14 for -- it undoubtedly creates challenges for the
15 Patent Office and prosecutors and the Federal
16 Circuit in its application.

17 But, it's a natural experiment. We
18 saw in the Federal Circuit's decision, we saw a
19 prediction from Judge Moore. She said that if
20 these claims were invalidated, it would decimate
21 the software industry. That's a direct quote.

22 And did that happen? No. No, to the

1 contrary. If you had invested in an exchange-
2 traded fund of software companies the day Alice
3 was decided, you would have beat the market very
4 handily.

5 You can check my work. Look at I-
6 Shares ETF. It's a basket of large software
7 companies. Many of which have very significant
8 patent holdings, Microsoft, Adobe, and many of
9 which don't like Red Hat that operate more in the
10 free software world.

11 So it's a quite balanced
12 representative of the software world. That fund
13 outperformed the S&P 500 by almost 100 percent.
14 You would have doubled your returns if you had
15 invested in software the day Alice was decided.

16 So, I think we have to look back at
17 the predictions of doom. And the conclusion is
18 undoubtedly that they were inaccurate.

19 So I think when the Patent Office is
20 considering how it's going to look at reforms and
21 proposed reforms, that that's a very important
22 big picture thing to look at.

1 So, and I also think in terms of the
2 practicalities of Alice, we've seen it be
3 extremely beneficial for smaller companies
4 targeted by low quality patents. There was
5 discussion from representatives from Amazon and
6 Intel that I think gave good examples of that
7 kind of experience.

8 And at EFF we tend to deal with
9 smaller companies that are contacting us because
10 they can't afford to call Fish & Richardson. And
11 we -- after Alice we finally have some reasonably
12 good news for them that it may be possible for
13 them to defend a suit for less than the kinds of
14 amounts that they were looking at previously.
15 Where you have claims that are clearly quite
16 vulnerable to an Alice challenge. And you can
17 bring a Rule 12 Motion to Dismiss.

18 The costs are vastly lower then under
19 the old rule. Where you really had to go through
20 discovery and get to Summary Judgment and spend a
21 million dollars to defend a suit.

22 And I think if you look at the kinds

1 of cases where people have won 12(b)(6) motions,
2 many of them are just a rogue's gallery of really
3 low quality patents that were being used by the
4 worst of the worst of the -- of patent assertion
5 and that had no business model other than
6 leveraging the cost of defense.

7 So, we are big fans of Alice at EFF.
8 And urge the Office to be cautious about seeking
9 reform that would undo the good that it's done.

10 So turn, if I have time, to topics
11 about guidance. I think the -- I understand that
12 the Patent Office is looking at decisions that
13 sometimes are hard to read together.

14 But, I think the most useful thing for
15 it to do is to look at the language in Alice.
16 And I think the provision, the updated Section,
17 and it's 2106 in the MPEP could really use just
18 some more direct quotes and some block quotes
19 from Alice.

20 And in our written submissions, we'll
21 suggest what we think would be most helpful
22 there. And I we particularly think the Office

1 should -- it's guidance should include a clear
2 statement and advise to examiners that In Re
3 Alappat is no longer good law.

4 That if you look again to the Federal
5 Circuit's decision in Alice, Judge Reyna -- then
6 Chief Judge Reyna explained under Alappat, this
7 was an easy case. This is especially programed,
8 general purpose computers. It's patient eligible
9 under Alappat.

10 And I think that was right. And the
11 Supreme Court clearly did not agree. In RE
12 Alappat is no longer good law. And it really was
13 the rules of the road for a long time.

14 I think that guidance would be really
15 much clearer if there was an explanation that
16 this is what the change was. And so, -- yes. So
17 that's it.

18 MR. KRAUSE: Okay. Thank you, Mr.
19 Nazer. Julie Samuels at Engine.

20 MS. SAMUELS: Thank you so much. Oh,
21 that was loud. And thank you to the Patent
22 Office for coming out here and for hearing from

1 all of us.

2 And from everyone today, I think it's
3 been a really illuminating series of
4 conversations. And one of the things, I am here
5 as a representative of an organization called
6 Engine that works with very small startups
7 primarily in the high-tech space.

8 And quite frankly, the vast majority
9 of those startups are not dealing with the patent
10 system necessarily because they want to. They
11 tend to be very small.

12 They maybe don't even have enough
13 funding to have engaged in the patent process
14 yet, even though many do have plans to do so.
15 But they often find themselves on the receiving
16 end of, you know, a threat of litigation. Or
17 actually a complaint filed against them.

18 And so what I really hoped to be able
19 to represent today are these two kind of crucial
20 overlapping constituencies. Which are these
21 small and innovative startup companies.

22 But also this constituency of people

1 who -- or companies, or innovators, however you
2 want to determine it, who find themselves working
3 very closely with the patent system. But maybe
4 not necessarily out of choice.

5 And some people have already said this
6 earlier, but I would just like to point out again
7 that that constituency is also a constituency of
8 the Patent Office, right? It's not just the
9 constituency of patent holders that the Patent
10 Office has to care about.

11 But the constituency of innovators who
12 are those who are pushing for the progress of the
13 useful arts and science. And so that's kind of
14 what I hope to speak to a little bit today.

15 And I think conceptually there are a
16 lot of people, probably in this room, part of
17 these conversations, who might even fault some of
18 those companies for not doing more to interact
19 with the system sooner. Not filing patents even
20 earlier. Not engaging sooner.

21 But the system was in fact conceived
22 in a way that would incentivize that engagement

1 through a robust notice function. And I think
2 that many of us in the room know right now that
3 particularly when it comes to software, the
4 notice function is not working as I would argue
5 it was intended.

6 In fact, it makes that kind of
7 engagement that's based on notice impossible not
8 just for small companies, but for quite large
9 companies. I think even for Google it's
10 impossible to know what exists in the world of
11 patents on the books.

12 So there's some numbers out there on
13 this. Though they're kind of hard to find.
14 There's a 2012 paper that estimates that in the
15 software space in order for patent lawyers to
16 look at every software patent even briefly for
17 ten minutes to determine if that patent might
18 apply to the invention at hand, we would need
19 approximately two million patent attorneys
20 working full time to compare every software
21 producing firm's products with every patent
22 issued in a given year.

1 And allowance rates have gone up since
2 2012. So those numbers I'm sure are even larger.

3 Which basically leaves companies with
4 very few options. And this is, I think, why we
5 often find companies who aren't more proactively
6 engaging with the system and with the Office.

7 And of course the second piece there
8 is quality. We cannot have a conversation about
9 the notice function, about proper incentives,
10 without discussing the quality of the underlying
11 patents.

12 And among the small companies that I
13 work with every day, we have seen quality improve
14 since the Alice decision. For a lot of reasons
15 Daniel talked about, and I now get to as well.

16 Because now a lot of these small
17 companies have a tool to push back against
18 threats that they face. And we've seen that time
19 and again.

20 So, I want to talk for just one more
21 second about those small -- the small startup
22 companies. And some of these numbers actually

1 come from Professor Colleen Chien, who you'll
2 hear from later. So, I hope I'm not stealing
3 your thunder.

4 But, 82 percent of troll activity
5 targets small and medium sized businesses.
6 Fifty-five percent of troll suits are filed
7 against startups with revenues of less than ten
8 million dollars.

9 These companies are generally lacking
10 in resources to decipher vague and what are quite
11 frankly often bogus demand letters. So, these
12 startups find themselves vulnerable.

13 And these startups, new firms in
14 particular, research that Engine did with the
15 Kaufman Foundation, showed that these new firms,
16 these startups, are responsible for all net new
17 job growth in the United States. So this is a
18 very real concern.

19 And what we're talking about is not
20 kind of some abstract problem. It actually is a
21 meaningful -- it's a meaningful piece of the
22 puzzle when we think about job growth and

1 economic development in this country.

2 And so what we've seen is that
3 stronger one on one protections that we have seen
4 in light of the Alice decision and in the past
5 two and a half years, have incentivized the kind
6 of risk taking that we want small companies to
7 make.

8 The majority of those new firms will
9 fail. But the ones that don't will create net
10 new job growth. And we want to incentivize risk
11 taking.

12 We do not want to incentivize
13 infringement. That is not my point at all. But
14 we want to incentivize growth of companies.

15 And so when you have a situation where
16 the majority of patents are invalidated under
17 101, are cases that involve a non-novel, or an
18 abstract invention, that is actually in line with
19 how technology, technologists and new firms work
20 today. That is -- those are the kinds of risks
21 that we want to incentivize.

22 So, I've got a couple of examples that

1 come to mind. And I can't really say the names
2 of these companies because most of the times it
3 doesn't even get to litigation.

4 But, in the past couple of months I've
5 heard from at least three small companies on both
6 coasts who have, because of Alice, been able to
7 avoid incredibly expensive litigation.

8 In one instance, a group of companies
9 came together. It was a joint defense agreement.
10 They were able to draft an Alice 12(b)(6) Motion.

11 They sent it to the Plaintiff. And
12 the Plaintiff had sent a draft complaint. So
13 nothing was ever filed. And when the Plaintiff
14 saw the motion, they dropped the suit.

15 Because I think that Plaintiff was
16 rightly concerned about the quality of the
17 underlying patent. In that instance, Alice is an
18 incredibly powerful tool.

19 And any efforts to dial that back that
20 come from the Office, that come from Congress, I
21 think are incredibly dangerous -- incredibly
22 dangerous for this country beyond just for the

1 Patent System, but for these job producing
2 companies.

3 While I'm on the topic of small
4 startups, one kind of piece of, one specific
5 suggestion I have for the Patent Office is to --
6 I would love to come up with a world where we can
7 better encourage interaction between examiners
8 and the founders of these companies and the
9 technologists at these companies. Literally just
10 in a social setting.

11 Have them interacting more. Talking
12 about the types of technological problems,
13 technological solutions that these companies are
14 working on. So that when they come in front of
15 the examiners, you've got more familiarity with
16 what's going on.

17 I literally think we should like put
18 these people in a room with a couple bottles of
19 wine more often. And just let them -- let them
20 hang out.

21 I actually think that would go far
22 toward dealing with the quality issue. Because I

1 think people would just have better aligned
2 incentives in those instances.

3 Another question had to do with
4 investors and investment. I work with a lot of
5 investors, a lot of the VC community.

6 To be fair, there's some splits in the
7 community. Most of the Venture Capitalists I
8 know who invest in high tech and software
9 companies don't have much love for the patent
10 system.

11 They see it as a drag on the economy.
12 They see the patent troll problem outweighing the
13 benefits of patenting under small companies.

14 I'm happy to -- I'll be mindful of the
15 time. But there's a lot of detail out there. I
16 know you've heard from Professor Robin Feldman
17 this morning. I unfortunately got here a little
18 bit later. She's written on this some really
19 interesting stuff, which I'm happy to share, and
20 we'll put in our written comments.

21 And finally, there are just a couple
22 of things that came up in the request for

1 comments that I did want to talk about. We
2 talked a little bit about -- this has come up a
3 bunch today.

4 More consistency is needed. But I
5 would just like to echo other panelists who have
6 said that this is how case law works. This is
7 how common law works. And the process is
8 working.

9 And we are getting more and more
10 clarity as the year since Alice goes by. So,
11 we're excited about that.

12 One thing I also -- I mean, this will
13 be my last comment. Well, I have two quick
14 comments.

15 I feel like the request for comments
16 was really focused -- it started from a premise
17 as if Alice were bad. And I think there are many
18 people here today, I think there are many people
19 particularly in the tech industry that I work in,
20 but beyond that, who actually think Alice is
21 great.

22 So with that, I would also say I don't

1 think we need legislative changes when it comes
2 to 101. I support Alice doing its job. Thank
3 you.

4 MR. KRAUSE: Okay. Thank you very
5 much for those panel members. And we hope to
6 receive written comments from all of you. It
7 sounds like some of you have promised those
8 already.

9 If you have questions for the
10 panelists, put them on the cards. They'll be
11 collected. I can certainly start with a question
12 or two.

13 I was intrigued by the suggestion of
14 a wine party with the PTO. I'm not sure if we'd
15 all be invited to that.

16 But, as you're -- you're talking about
17 situations where your client's, the people you
18 work with, are seeking patent protection from the
19 Patent Office? And you're hoping that they could
20 interact with the examiners on that basis?

21 Or did I get that backwards?

22 MS. SAMUELS: I mean, I think the

1 benefit would come from examiners -- I think the
2 benefit would come from both sides of the coin.

3 But on the one, you know, from the
4 perspective of the Patent Office, I think if the
5 examiners were to spend time kind of
6 understanding the types of companies that these -
7 - a lot of these founders are building, the types
8 of challenges they were facing, and understanding
9 what that looked like, I think that when a new
10 technology came across that examiner's desk, even
11 if it's in an art unit that that examiner is
12 really comfortable with, these things are new.

13 Right? The idea of these inventions
14 that come to the Patent Office is that they are
15 new.

16 I think it would be helpful if people
17 -- examiners had a better kind of idea of the
18 context in which those technologies were being
19 built.

20 And I think the flip side, I think
21 that a lot of people from companies would benefit
22 to understand how the system actually works.

1 Because when you are particularly at a small
2 company, these companies they don't have general
3 counsels.

4 Right? These companies are tiny. And
5 a patent, you know, that sounds great, maybe. Or
6 dealing with this that's a luxury for a lot of
7 really small scrappy companies.

8 So I think if you create a space to
9 better -- to basically increase the connective
10 tissue between those two communities, I think
11 everyone would benefit.

12 MR. KRAUSE: Okay. Everybody wants to
13 talk about community that's not actually in -- is
14 on the wrong side of the patent game in that
15 they're more likely to be sued for patent
16 infringement? And apply --

17 MS. SAMUELS: That's what we've seen.

18 MR. KRAUSE: That's what you --

19 MS. SAMUELS: That's what we've seen.

20 MR. KRAUSE: Okay. Let's see, and I
21 sense a certain tension I guess between -- in the
22 positions that both Mr. Nazer and Ms. Samuels

1 had, even compared to the other two panelists.

2 And I was curious, Allen, we heard
3 from Daniel that a lot of software engineers just
4 don't like software patents. We're hearing that
5 kind of from Julie as well. And we heard that
6 earlier today as well.

7 And yet you say there is a space for
8 patenting in the Google Corporation. Do the
9 Google engineers agree with that philosophy?
10 That software, if it provides a technical
11 solution, should be patented?

12 MR. LO: Tough question. They said
13 you asked tough questions. I heard that from
14 this morning.

15 (Laughter)

16 MR. KRAUSE: That's why I'm here.

17 MR. LO: You know, I think there's
18 different views philosophically on whether
19 software should be patented.

20 You have a lot of people who come from
21 the open source community and have ideas and
22 views and philosophies around what should be the

1 case. Whether it be various types of protection
2 including patents.

3 I think what is very clear, and this
4 is why you hear tension and you hear different
5 points of view is that there's a balance that
6 needs to be struck between providing not too
7 little protection, but not too much protection.

8 And I think what Alice, from our
9 perspective, did was, it helped shift things back
10 to becoming more balanced. There was a point in
11 time when too many patents were being issued on
12 things that were abstract.

13 And companies then had to deal with
14 this from an infringement accusation stand --
15 assertion standpoint. And by providing more
16 balance to the system, we have not eliminated
17 software patents, but we've just in some ways
18 clarified and raised the bar in terms of what it
19 takes to get a software patent.

20 And ensured that the point of getting
21 patents and the standards that should be applied,
22 need to help achieve the purpose of the patient

1 system. Which is to promote the useful arts.

2 And I think we're still working
3 through that. I think that the big challenge
4 that we saw in the first year or so post-Alice
5 was examiners not knowing how to apply that.

6 And so we saw lots of rejections under
7 101 with no opportunity or ability to try to
8 prosecute those claims into patentability.

9 What we are seeing now because of
10 Federal Circuit cases is more of an evolution and
11 more of an understanding of okay, now we not only
12 know what is not patent-able, or what is
13 ineligible subject matter, but now we're starting
14 to understand what is eligible subject matter.

15 And what I would encourage the U.S.
16 PTO to do with its examination corps is to
17 continue to look at the cases and from our
18 perspective, it really is focusing around
19 technical solution to a technical problem. We
20 think that is a positive resuscitation of the
21 standard as opposed to a negative resuscitation
22 of what's not patent-able.

1 And I think it gives something for all
2 patent applicants something to shoot for in terms
3 of how to get a patent allowed.

4 MS. SAMUELS: If I could just really
5 quickly?

6 MR. KRAUSE: Go ahead.

7 MS. SAMUELS: I don't think that the
8 majority of companies that Engine works on behalf
9 of are -- would argue that there shouldn't be
10 patents. I actually don't think that's the case.

11 I think that the system, engaging with
12 the system can be so incredibly overwhelming at
13 the outset that it is -- you know, it's this kind
14 of proverbial put your head in the sand.

15 So I actually don't think that tension
16 entirely exists. And I agree with everything
17 Allen just said about Alice helping get back to a
18 place of balance. Where we do want to
19 incentivize the kind of small companies I work
20 with to effectively and responsibly engage with
21 the system to, where appropriate, get a -- apply
22 for a patent.

1 And I think right now most of them
2 just kind of feel like, oh, this is -- I can't
3 handle this right now. This is too much.

4 MR. GARDNER: Yes. I mean it's -- if
5 I could comment on the same. So, I don't think
6 there's tension, I think there's sort of two
7 sides to the coin.

8 So, you know, Alice would certainly
9 help companies like us. In that it protects, you
10 know, companies who -- whose business plan is --
11 there is no intention to actually invent.

12 It's just an intention to drive
13 revenue by suing small companies. But on the
14 other hand, I mean, the patent system was built
15 to encourage innovation.

16 So, as an inventor, when we go out and
17 build things, we're not required to get a patent.
18 But if we want to take advantage of the patent
19 system, we can go and do that.

20 The issue with Alice is it kind of
21 threw the baby out with the bath water. And now
22 we're finding out, you know, over a couple of

1 years now we're seeing that, like, companies like
2 us are actually affected by the process.

3 Now if you want to invent and go out
4 and have the right to pursue a patent, we should
5 be able to do that in the spirit of why the U.S.
6 PTO and the Patent Office was actually created.
7 Was to allow inventors to go out and to invent.

8 So I mean, we, you know, there are
9 some reforms that we thought about ourselves like
10 venue selection, discovery procedure and costs,
11 staying cases to allow the U.S. PTO to complete
12 invalidating changes, enhance pleading standards,
13 damage limitation. And most importantly,
14 enhancing the ability for unfairly accused
15 defendants to get back their attorney fees and
16 costs.

17 So, there are definitely measures to
18 strike the balance. And I think that's what
19 you're seeing here.

20 You know, Daniel was talking about,
21 you know, ETS and the S&P. These are public
22 companies that can use market forces against

1 small companies.

2 Now, if we were going to throw out all
3 software patents that really levels the playing
4 field so that everybody can go out and build. I
5 actually would be supportive of that.

6 But currently that's not going to
7 happen. But if companies like Marqeta, it's
8 actually spelled wrong here. It's a Q-, not a G-
9 just in case you're looking for us.

10 If we want to go out and pursue a
11 patent, we should be able to do that. Especially
12 if we're inventing. And then obviously the U.S.
13 PTO has a process to take us through to make sure
14 whether that patent is going to be issued or not.

15 But in regards to Alice, it actually
16 affects us positively. Because it protects us
17 from trolls out there.

18 But it also affects us negatively,
19 because it doesn't really allow us to invent and
20 protect those inventions. Which is the whole
21 essence of why the U.S. PTO was invented.

22 MR. KRAUSE: Would you describe your

1 inventions as meeting the test that Allen
2 articulated? Are they technical solutions to
3 technical problems?

4 Or are more of these conceptual
5 inventions?

6 MR. GARDNER: They are very technical
7 solutions. Because we're using software to
8 affect the financial services. Which everything
9 moves very, very quickly.

10 So, speed is all about algorithms and
11 how we go build things. So we have
12 mathematicians, physicists, who go out and build,
13 literally write computer codes to solve that.

14 So, I believe we apply to that
15 standard. But, you know, as Allen mentioned,
16 what the difficult part is, is we get these
17 responses back from the U.S. PTO and we really
18 don't know how to respond to them.

19 Saying, well, we actually did that.
20 You know, we actually put the right language in
21 there. We feel like we wrote high quality
22 patents.

1 But the rejections we're getting are
2 -- some are based on, you know, prior art, which
3 we're defending. But some of them just don't
4 make real sense to us considering that, you know,
5 we not only applied, you know, a certain standard
6 to writing the patent, but we're actually having
7 implemented it.

8 We're actually using it in our
9 technology. We're affecting, you know, not only
10 the startup ecosystem who's leveraging our
11 platform, but also very large public companies,
12 which are using our platform.

13 We feel like we should be held to a
14 different set of standards because we actually
15 implemented them.

16 MR. KRAUSE: Do you have some kind of
17 legislative language in mind for us to take that
18 into account? Or how would we actually take into
19 account the difference between someone who's
20 actually implemented the invention and somebody
21 who simply hasn't?

22 MR. GARDNER: Well, I think that's one

1 of the standards. So, if we've actually
2 implemented the invention using computer code, I
3 think that's one lens to look at.

4 I think going to Congress is probably
5 the last step. I frankly think that the
6 ecosystem itself and the U.S. PTO could probably
7 come up with a set of standards before doing
8 that.

9 But I'm, you know, I'm on the side of
10 I want to be able to get my inventions approved.
11 But at the same point, Alice certainly protects
12 the startup ecosystem.

13 It certainly protected us in the
14 beginning when we were going out and building our
15 technology. So, there's certainly a balance
16 there.

17 MR. KRAUSE: Okay. Daniel, you didn't
18 have a chance to respond directly to Allen. And
19 so do you think -- I think you did say that you
20 have a philosophy that software shouldn't be
21 patent-able.

22 And Jason actually said he could

1 accept that. Feel free to answer with or without
2 reference to the First Amendment.

3 MR. NAZER: Yes. Yes, I think there's
4 -- there's some big philosophical questions.

5 That the free software community
6 believes that if you're writing software and
7 you're not copying someone else's software,
8 obviously patent is very different from copy
9 write in that you can collaterally attack
10 someone. You haven't free rode on their work.

11 And I think within the free software
12 community, even if you could prove to them that
13 the patent system was actually better in that it
14 incentivized more work, they still wouldn't be
15 moved by that. Because it's a personal freedom
16 question for them.

17 That and I think it was interesting
18 for Allen, like within all these com -- you know,
19 there are going to be people like that who have
20 that view. At Google it's obviously not the
21 company line.

22 I think from the panelists'

1 perspective, your -- the -- you're not going to
2 necessarily be moved by that. But you will want
3 to look at the big picture in terms of well, is
4 the system in a particular area working to
5 incentivize innovation we wouldn't otherwise
6 have?

7 Or I think it was the gentleman from
8 Amazon who said, or are we getting patents that
9 are taking more out of the public domain than
10 they're giving into the storehouse of knowledge

11 And I think Alice worked very well in
12 terms of -- as to computer implemented
13 inventions, as to improving that calculus. Where
14 previously you could say, just do X with a
15 computer, and you didn't -- you claimed all
16 means.

17 You know, so you're raising kind of
18 five -- 112 issues as well as 101 and 103 issues
19 perhaps. But that definitely the patents that
20 Alice is most clearly undermining are the patents
21 that were giving the least value to society.

22 And so I think even leaving aside the

1 kind of philosophical free software perspective,
2 I think Alice is independently and very important
3 for that reason.

4 MR. KRAUSE: Okay. Yes.

5 MR. HANNON: I have a question
6 regarding, Allen, you mentioned the technical
7 problem with the technical solution. Which is,
8 you know, reminiscent of the EPC approach to the
9 eligibility issue.

10 And to me there is an easy question in
11 relying that in that you sort of have to define
12 consensus of what is technical, right? And so if
13 we have the aim of a one size fits all solution
14 in our patent eligibility statute, do you have
15 any insight as to what we could do to better
16 define what is technical?

17 MR. LO: I mean it's something that
18 we've and many large companies that file abroad
19 have to deal with now in Europe and in other
20 places. And we're seeing this show up in China
21 and India and other jurisdictions as well.

22 The whole reason for coming up with

1 that standard is to allow flexibility. I don't
2 think there is a way to describe technical in a
3 very broad sense. And have that be something
4 that everyone understands how to apply.

5 But if we at least have that concept
6 built in, what we're really talking about is, is
7 that -- and you know, Jason said, you know, in
8 his case, his -- the inventions from his company
9 are very technical in nature.

10 We kind of have a sense of what that
11 means. And we have a sense of what it isn't.

12 And when we see the kind of patents
13 that we've seen that are very broad, that have,
14 you know, very thin specification, and are very
15 results oriented with no -- nothing fleshed out
16 in terms of detail, we -- and we have heard many
17 stories and cases of inventors, and I use that in
18 the very loosest sense, just, you know, sitting
19 around a dinner table brainstorming ideas and
20 just filing patents on these things. And then
21 going out and enforcing them.

22 There's really nothing technical about

1 a lot of what those patents contain. So, while I
2 don't have a very specific answer to the
3 question, I think it's something that would need
4 to be developed. And I think could be developed.

5 Because we've seen it being -- we've
6 seen it developed in other jurisdictions.

7 MR. CABECA: So just a quick question
8 related to that. So obviously before Alice, you
9 know, in the U.S. we could get a much broader
10 claim then you could in Europe per se.

11 You know, because they've had their
12 technical effect standard now for quite some
13 time. We saw it in the earlier panels today that
14 we have a lot to learn.

15 That we -- you know, there's a
16 recommendation for the U.S. system to learn from
17 what other countries have put into their -- into
18 their laws. And then we saw the side by side
19 comparison in at least the life sciences example.

20 But even though we can't get as broad
21 of a claim in the software space as we could pre
22 Alice, now with the two step test and the

1 evolving case law that we're seeing, you know,
2 post the Alice decision from the Federal Circuit,
3 what is your sense -- the -- generally, you know,
4 what I'm hearing is you could still get a broader
5 claim in the U.S. even with the current two step
6 test then you can in Europe, compared to their
7 technical effects standard.

8 I'm just curious what your thoughts
9 are. Is where we are today, you know, more
10 restrictive, less restrictive, or about the same
11 as in comparison with the European standard? Or
12 perhaps the standard from another office?

13 MR. LO: So, I put in my two cents.

14 I'll --

15 MR. CABECA: Direct it two cents.

16 MR. LO: I'll just give my two cents.
17 I'm sure these guys have their own thoughts as
18 well.

19 I think it's still evolving. I think
20 we -- it's early days to be able to say it's more
21 restrictive, less restrictive, same, right at
22 this point.

1 But I think what's clear is that the
2 data points are in play now. And it appears that
3 the Federal Circuit is starting to coalesce
4 around this standard. Because it's showing up.

5 And we've seen this, you know, going
6 back to, you know, decisions and concurrence
7 dissents by Judge Newman from the very early days
8 of the court around this subject matter, this
9 topic of 101.

10 So, this isn't a new concept in U.S.
11 jurisprudence as well. It's just now starting to
12 take shape and form. Because of the Alice
13 decision, it now has meaning. And I think we'll
14 have to wait the next couple years to see how it
15 plays out.

16 I think the important thing though is
17 that the Office recognizes this standard and
18 think about how it wants to provide guidance to
19 examiners so that applicants who are now applying
20 for applications have the right ability to be
21 able to have the -- to be able to prosecute with
22 an examiner. And apply this now evolving

1 standard rather than waiting too many years and
2 just get blanket rejections without any direction
3 or guidance from the examiners.

4 MR. NAZER: I haven't followed the
5 international decision super closely. I know in
6 Australia there's been some decision that are
7 kind of like the Federal Circuit, have gone a
8 little -- following Alice and citing it
9 approvingly. And otherwise distinguishing it in
10 a way that -- that gives it less truck.

11 I do think the technical effects at
12 some in -- at some -- I think there was a
13 decision out of the Central District of
14 California that had a sort of you know it when
15 you see it take on Alice. And I've certainly
16 seen in Australia some decisions like that.

17 There was a patent application that we
18 wrote about at EFF that was granted on filming a
19 yoga class. And the innovation was the camera
20 was placed at the back of the room, you know, in
21 a studio with a floor, you know, --

22 MS. SAMUELS: White walls. I think it

1 had white walls.

2 MR. NAZER: Like most of the yoga
3 studios. And the examiner couldn't find anything
4 about the camera at exactly four and a half feet
5 high.

6 And in Australia they ran the same
7 application. And the examiner was like this
8 isn't a technological innovation. This is just
9 filming a yoga class.

10 So, it's certainly a tool. I know our
11 EFF, it was before my time, EFF filed an Amicus
12 Brief in Ilskey, it was along those lines.

13 MS. SAMUELS: I would just add one
14 more thing when you're talking about
15 international standards. And earlier today at
16 least one person brought up TRIPS.

17 But, you know, thematically over the
18 course of the day it's been clear that different
19 industries by in large have different feelings on
20 where 101 jurisprudence is. And where we are
21 opposed to Alice.

22 And I live in the real world. And I

1 understand that we have a one size fits all
2 system. But I think conceptually a lot of people
3 could agree that sometimes that doesn't make that
4 much sense.

5 And I actually do think if you looked
6 and worked closely at TRIPS, there is a real
7 argument for treating software inventions
8 differently. I think you could do that under
9 TRIPS.

10 I think that, you know, we've been
11 patenting software not for a very long time in
12 this country. There's a history that is
13 significantly shorter than other types of
14 technology. And so I think that there are very
15 real and very serious growing pains in this
16 industry.

17 And I think that to the extent we have
18 a one size fits all system, we need to address
19 those concerns. And other industries, you know,
20 it's not going to be perfect for everyone.

21 But I think that's a very real thing.
22 But that's why you guys get paid the big bucks.

1 MR. KRAUSE: Do you think we could say
2 no software patents whatsoever, consistent with
3 TRIPS? Even if they embodied technological
4 solutions?

5 MS. SAMUELS: I think that there is
6 a real argument that you could say that
7 consistent with TRIPS. Yes.

8 I think politically that would be a
9 lot harder. But I think that intellectually and
10 -- I think you could do that, yes.

11 MR. NAZER: Certainly New Zealand has.

12 MS. SAMUELS: Yes.

13 MR. NAZER: And if you look at the law
14 New Zealand passed about two and a half years
15 ago, they're a TRIPS signatory. And there's a
16 pretty major reform on software patents.

17 MR. HANNON: So the couple of
18 questions from the floor that I'll paraphrase
19 here. But essentially I think they're trying to
20 get some free legal advice from our distinguished
21 panelists.

22 But, what advice would you all give to

1 a software startup company post-Alice?

2 MR. GARDNER: Well, as a software
3 company post-Alice.

4 MS. SAMUELS: Yes. There's your guy.

5 MR. GARDNER: I mean, I think it's --
6 well first off it's being involved in this. It's
7 like the fact that the U.S. PTO had, you know,
8 put together the day, and Virginia put a day
9 here, there is a general concern about, you know,
10 the current system and how Alice has affected it.

11 So I actually had been recommending,
12 and it turns out, you know, had spoken to a
13 couple of other CEOs who are just as worried as I
14 am. Who, you know, one, the CEO of Cabbage wrote
15 a book. He's actually involved in, you know,
16 several at least locally and I think it's
17 Atlanta, Georgia, around patent law.

18 I would recommend getting involved.
19 And I would recommend, you know, if you feel like
20 you have something that merits patentability to
21 enter the process.

22 The hard part is, is you know, this --

1 how do you write a -- how do you create the
2 subject matter for a patent? I mean, when I sat
3 down with our patent attorney to actually write a
4 patent, you know, she was talking about, you
5 know, subject matter and the things, you know, it
6 felt like I was speaking another language.

7 So, actually sitting down and taking
8 what we write in code and put it into something
9 that is actually patentable. So, that actual
10 process was great. To be able to do that.

11 So, as, you know, I talk to, I advise
12 a lot of small companies. I also advise
13 investors.

14 And some investors are, as Julie
15 mentioned, some investors are on one side where
16 they don't like patents at all. Because it
17 frankly affects the companies that they're
18 investing in. And Alice has actually protected
19 them.

20 But at the same point, you know, your
21 valuation goes up. I mean, if you do have a
22 patent, whether in process or not, whether it's

1 been rejected or improved, I mean, it increases
2 your valuation.

3 Of course if you go through a
4 liquidity event, whether it's -- especially if
5 you're being acquired, larger companies acquire
6 companies for their patents. And there's a
7 promise there.

8 So, I think definitely as, you know,
9 small technology companies, if they believe they
10 have something that fits the standard, then they
11 should absolutely go and go through the process
12 of getting a patent.

13 MR. LO: I think for us it's -- and
14 it's really the big impact that we've had to --
15 the big change that we've had to make internally.
16 Which is how we draft applications.

17 And again, because it's not about
18 Alice saying that you can't get patents on
19 software or computer implemented inventions, it's
20 about whether or not there's a technological
21 solution to a technical problem.

22 And the more we can disclose,

1 technology and technological advance, the more we
2 can show the technical effect. The more we can
3 ensure that the claims reflect that.

4 Then I think the more -- the higher
5 the likelihood that a company I would advise, or
6 our own company, will be able to get a patent
7 allowed. Whether it's from the U.S. PTO, the EPO
8 or our other jurisdictions as well.

9 This the thing for us that I think is
10 -- that goes a little bit -- and I mentioned it,
11 but I just want to sort of mention it again.
12 Having standards that are more similar, not
13 exactly sure whether they're the same or one is
14 slightly more liberal than the other, but closer,
15 it simplifies things for us.

16 Because now we know how to draft
17 applications globally as opposed to let's draft a
18 case for the U.S. and let's draft a case for
19 everywhere else. And so having the standards
20 start to converge makes it more uniform in terms
21 of our ability to make sure we're protecting our
22 software innovation.

1 MR. KRAUSE: Julie, you mentioned that
2 venture capitalists aren't looking necessarily
3 for patents anymore. And yet you just heard
4 Jason say that patents can be an important
5 component of the valuation of a small company.

6 Do you have statistics to back that --
7 and we also heard anecdotally. Go ahead.

8 MS. SAMUELS: Yes, I've got a couple
9 I think in my notes here. And these are from a
10 paper that Robin Feldman put out. So, like I
11 said, I believe she was here earlier and I missed
12 her.

13 MR. KRAUSE: Yes.

14 MS. SAMUELS: I don't know if she
15 talked about this at all. She surveyed 200 VC
16 firms. Seventy percent of venture capitalists
17 have portfolio companies that received demand
18 letters.

19 The "vast majority" of claims came
20 from companies that essentially NPEs, Non-
21 Practicing Entities. This study found that
22 existing patent claims could be "a major

1 deterrent to investing in startups, and cost on
2 average over one hundred thousand dollars to
3 combat."

4 There was another study by Katherine
5 Tucker, I believe. I might be getting her name
6 wrong. But I think that's right. And I can
7 include that in my comments.

8 That estimated in fact that VC
9 investment in startups would have been eight
10 billion dollars higher but for troll threats.
11 That was the five years' previous. And I think
12 that study is now two or three year's old.

13 That really has to do with both, I
14 think, of the numbers I have with me right now, I
15 have a little bit more to do with troll activity.
16 But, you can't separate the two.

17 So what we -- what I have seen
18 personally and what some of the data I know has
19 kind of pointed out is that the deterrent effect
20 of bad actors armed with low quality patents has
21 been a real impediment to the flow of venture,
22 the flow of investment.

1 And while I don't disagree with
2 Jason's point, and I think that there are always
3 going to be investors who look for, you know, for
4 IP value, that's a real thing. I wouldn't
5 pretend otherwise.

6 We have seen that the negative
7 consequences of particularly pre-Alice software
8 patents has been incredibly problematic. And I
9 can also say, this is a little bit more
10 anecdotally, I work very closely with a lot of
11 venture capitalists.

12 And the vast majority of those folks
13 that I tend to work with don't look for a patent
14 portfolio as a determinant. They look for
15 network affect. They look for a business that's
16 in the marketplace, that's doing well.

17 And if there's a patent, great. But
18 that tends to not be the driver alone. And I
19 think pretending that patents as a driver for
20 investment alone in the software space is I think
21 a potentially dangerous path to go down.

22 MR. KRAUSE: Okay.

1 MR. GARDNER: Yes. And I -- just to
2 point out, I mean, we're talking about Alice
3 protection versus Alice impact.

4 We're impacted by those decisions.
5 There are plenty of startups out there that are
6 protected by those decisions so that they're not
7 seeing, you know, getting the receiving end of a
8 demand letter from a patent troll.

9 And we have -- one of our strategic
10 investors, one of the reasons they actually
11 invested in us is because of the patent portfolio
12 we have. Even though it's in the process.

13 Because some of the things we're
14 doing, you know, Julie mentioned network affect.
15 I mean, like we don't necessarily have a network
16 affect.

17 We provide a very technical platform
18 to companies that want to build credit, debit and
19 prepaid products. So, that is very technical in
20 nature. And that's what they're leveraging.

21 MS. SAMUELS: But you can't separate
22 those two things, right? You can't separate the

1 --

2 MR. GARDNER: Oh, yes. For sure.

3 MS. SAMUELS: Right. Somehow we have
4 to find a place where it all works together.

5 MR. GARDNER: Yes. So, when we meet
6 with VC's, I mean we meet with somebody who
7 understands how the financial ecosystem works.

8 And knows that there's a lot of, you
9 know, technical inventions and code and things
10 that go behind that. Not necessarily a network
11 affect. But for sure.

12 MR. NAZER: One, sort of an anecdotal
13 story I would tell. The way that Alice helps
14 smaller companies, is we, they would -- NPE
15 activity was very active right around the time
16 Alice was decided in apps for restaurants.

17 So, just providing menus and pretty
18 basic apps. But, you know, when you have a big
19 customer it's a pretty big job to create these
20 apps.

21 And we had small companies were coming
22 to us because they would -- suddenly their work

1 was drying up. Because the clients, the larger
2 clients were demanding indemnification because
3 they were -- the market was getting hit sort of
4 hard by PAEs that no one wanted to do it unless
5 they were getting a giant company to provide
6 these services. So that they could indemnify
7 them.

8 And there was just -- it was just
9 washing the smaller companies out of that field.
10 And a lot of those particular PAEs have
11 subsequently had their patents invalidated under
12 Alice.

13 And so I think that was a real --
14 really encouraging event for that ecosystem.

15 MR. KRAUSE: Okay. This has been
16 great. I've just got -- we've got one minute
17 left. I've got one question. Fifteen seconds
18 each.

19 It sounded like every single one of
20 you was not in favor of the legislative fix to
21 this problem. To maybe codify Alice and put some
22 clarity into this aspect of the laws.

1 Did I understand that correctly? To,
2 Julie.

3 MS. SAMUELS: With regard to, I think
4 there are a lot of legislative fixings the patent
5 system could use. When it comes to 101, I don't
6 think we need legislation.

7 MR. KRAUSE: Daniel?

8 MR. NAZER: Yes. I don't think the
9 legislation. I would want is what's on the
10 table. So, I'm going to say no.

11 MR. LO: I generally would not favor
12 legislation. Particularly in order to allow the
13 courts to have more time to work through Alice.

14 MR. GARDNER: I would see it as a last
15 resort if we had to get a legislative fix. But
16 yes, if we could work it out ourselves, then by
17 all means.

18 MR. KRAUSE: Okay. Thank you very
19 much, all of you.

20 (Applause)

21 MR. KRAUSE: So we now have a ten
22 minute break. And then we'll be back at 3:00

1 p.m. for Panel Number Six.

2 (Whereupon, the above-entitled matter
3 went off the record at 2:51 p.m. and resumed at
4 3:01 p.m.)

5 MR. HANNON: If everyone can be
6 seated, please, we would like to begin the final,
7 second to last panel here. So first, we're going
8 to be starting from Dallas, Texas with Ms.
9 Jennifer Kuhn.

10 MS. KUHN: Hello, and thank you all
11 for staying this late in the day. And I would
12 like to thank the PTO for inviting me to speak
13 today. I'm Jennifer Kuhn. I'm Vice President
14 and Chief IP Counsel at a small software company
15 called Mattersight Corporation.

16 I'm also one of the Chairs of the
17 Amicus Committee for the Austin IPLA. The views
18 I'm presenting today are my views and they are
19 not Mattersight's views or the Austin IPLA's
20 views.

21 But the Austin IPLA is on record with
22 the United States Supreme Court in advancing an

1 interpretation of Section 101 that was largely
2 adopted in the Supreme Court's Bilski decision,
3 and that is when you're interpreting Section 101,
4 you should interpret it the way you interpret any
5 section of any statute of American law.

6 Today I would like to talk about how
7 we should apply that same consideration to our
8 evaluation of how well Section 101 is working.
9 Let's advance to the next slide.

10 So this is a quote from Ray Chen when
11 he was a senior PTO official, before he was
12 confirmed with the federal circuit. But it
13 speaks directly to the concerns that I have about
14 how Section 101 is being applied.

15 That is if patents are the currency of
16 the innovation economy, are we making that
17 currency available to all industries equitably
18 and not favoring some industries, disfavoring
19 others when there's no basis in the statutory
20 language or that favor or that disfavor.

21 So if we apply that kind of, we take
22 that kind of equitable approach, that kind of

1 efficiency approach, how well is 101 working to
2 support American innovation. We may see that,
3 advance to the next slide, please.

4 You will see that there is a lot of,
5 obviously we spent a lot of money on patent
6 prosecution. Thompson Reuters recently estimated
7 that up to \$2 billion is spent annually on US
8 Patent applications that never issue.

9 You also look at, and this is the
10 second point on the slide is, relates to
11 statistics that have been cited in different ways
12 throughout the day. But eight of the twenty
13 lowest allowance art units relate to software
14 innovations.

15 This leads you to conclude that
16 perhaps the software industry is spending a lot
17 and not getting much for it when it comes to its
18 investments in the patent economy. Now let's go
19 on to the next slide, quickly.

20 So when you end up with low allowance
21 rates, you also end up hampering how well we can
22 evaluate what our issue patents are worth. If

1 you're a small software company, you are not
2 paying anybody outside your company to evaluate
3 your patents and tell you what you're worth.
4 You're doing that on your own.

5 So one of the metrics that I have used
6 at Mattersight and that I think is a solid way to
7 evaluate patents is to look at how many times my
8 portfolio has been cited in 102 or 103 rejections
9 in applications by other software companies,
10 other applications, other patent examinations.

11 And if you have a significant amount
12 of software patent applications that are getting
13 tied up at the PTO, if they're never issuing, we
14 simply do not have the visibility that we should
15 have on whether or not our patents are actually
16 significant and having an impact in the
17 marketplace, that is they are preventing other
18 applicants from getting applications.

19 We never see those applications
20 because they are getting stopped not necessarily
21 on 102 or 103 grounds, but they may be getting
22 stopped solely on 101 grounds that end up proving

1 intractable.

2 So onto the next slide, please.

3 Software represents \$1 trillion GDP. Now what
4 this leaves me to say is what we need is that
5 software is treated equitably. There is no basis
6 in the statute for favoring other solutions and
7 disfavoring a software solution.

8 And clear standards, as Sharon Israel
9 pointed out this morning, clear standards are our
10 friend in this area. If we had clearer
11 standards, we very likely would have less of a
12 variance in the low allowance rates versus higher
13 allowance rates units as they relate to software,
14 the software industry.

15 My final slide, a lot of the
16 discussions that today has focused rightly on the
17 concerns that companies that are behind
18 themselves on the defending patent entrenchments
19 lawsuits have. But in truth, less than one
20 percent of patents are litigated, or companies
21 like mine, they are largely used to secure
22 financing and attract investors.

1 And patents are frequently licensed.
2 In 2014, KPMG analyzed patent royalty rates
3 across industries and found that the software
4 industry has a relatively high royalty rate for
5 patent licenses relative to other industries.

6 So they do have value other than
7 litigation and litigation concerns should not be
8 the sole driver for whether or not, for how we
9 evaluate how well Section 101 is working. Thank
10 you, that concludes my comments.

11 MR. HANNON: Great. Thank you, Ms.
12 Kuhn. Our next panelist will be Colleen Chien.

13 MS. CHIEN: So I'm going to present
14 today, thank you so much to the Patent Office for
15 being here and for inviting me to participate on
16 today's panel. And I'm going to be presenting
17 some research that Arti Rai and I are doing on
18 diagnostics innovation.

19 And this question of whether or not
20 putting aside kind of 101 policy and putting it
21 in focus, innovation policy more broadly, whether
22 we are seeing a decline in diagnostics innovation

1 in the post-Mayo period.

2 And we think this question is really
3 important for two reasons. One is because of the
4 importance of patents to diagnostics innovation.
5 A number of business models are based on having
6 patents. And so naturally, the impact of this
7 decision on this industry is important to look
8 at.

9 But also because the importance of
10 diagnostics innovation to several national
11 priorities, in particular the precision medicine
12 initiatives including those that were launched by
13 the president starting in the State of the Union
14 in 2015 and a lot of the energy around the Cancer
15 Moonshot and trying to come up with different
16 types of targeted therapies that help people that
17 don't have other options as well as healthcare
18 reform and thinking about the costs of medicines.

19 So if you go to the next slide, we
20 simply were looking at this question of have
21 these decisions, focusing mostly on Mayo, but
22 have these decisions been making it more

1 difficult to patent diagnostics resulted in a
2 decline in innovation beginning around 2012.

3 And we have a lot of caveats to this
4 analysis, primarily that we can't really measure
5 innovation only by looking at the different
6 metrics that I'm going to show today which are
7 patent filings and transactions.

8 There are other things that we're
9 looking at as well, and obviously a shifted trade
10 secret is something that is hard to measure. In
11 addition, I think something that's really
12 important is that there are a lot of other things
13 going on in the ecosystem.

14 And when we talk to companies, what we
15 hear about the most, and frankly in terms of
16 policy are things like reimbursement changes.
17 Also, things like the President's Precision
18 Medicine Initiative, other funding cycles are
19 going to be important.

20 Next slide, please. With that in
21 mind, we looked and tried to test two types of
22 hypotheses in terms of trying to tease out what's

1 happening. One is the kind of overall sense that
2 innovation as proxy by patent filings has
3 declined. That was the assertion that we set out
4 to test.

5 But we also wanted to look at whether
6 or not patent scope had narrowed. And we thought
7 that there were, in both of these cases, going to
8 be winners and losers to both of these types of
9 shifts. Even if the patent scope has narrowed,
10 that might help certain types of innovators, even
11 if certain patents aren't being issued, that make
12 certain business models easier.

13 So if you're trying to create an array
14 based business where you have a number of
15 biomarkers, well if I don't have to get licenses
16 from every single biomarker company out there now
17 because I don't have patents, then I'm freer to
18 operate. I can offer more tests on one kit and
19 that's more beneficial to the consumer.

20 But it might hurt those young startup
21 biomarker companies who are going to be the next
22 myriad and can no longer be so. So we wanted to

1 think about those, both of those factors. Next
2 slide, please.

3 And what we did in particular is look
4 at the amount of innovation looking at patent
5 apps. We looked at the scope of protection,
6 looking at patent claims and how long they were,
7 and we also looked briefly at the market for
8 innovation, and we focused on transactions.

9 And these are primarily SEC reported
10 transactions. When a public company enters into
11 a transaction which might affect its stock price
12 and its future work, it has to report it to the
13 securities and exchange commission.

14 So we looked for those and tried to
15 see what was happening in terms of those
16 publically reported transactions, which are just
17 a slice of the entire transaction market, but
18 they give us something.

19 Next slide, please. So I'm not going
20 to go too much into the details, but this
21 information will be available in our public
22 comments. What we did is look at innovation

1 before and after Mayo. It's as I mentioned
2 before looking through the lens of applications
3 and material transactions.

4 And we tried to create a control as
5 well as look at what we considered to be
6 diagnostic innovation. So we focused on what we
7 called core DX, what others I think are calling
8 kit or content diagnostics innovation. That is
9 the biomarker based innovation that is pervasive
10 in this field.

11 And then we created a control group
12 that was looking more at enabling technologies.
13 And if you look at the next slide, you can see
14 that the enabling technology group had similar
15 but more upstream analysis of gene and gene
16 expressions.

17 And so it was a good indicator of
18 activity in this area, but not being at one of
19 these kind of technologies that depended really
20 on that particular type of protection. So we
21 think this is a good control group, but we have
22 some caveats to that analysis.

1 Next slide, please. Here's all the
2 fine print about some of the weaknesses of this
3 approach. You know, we don't actually know when
4 once a decision comes out, how that's going to be
5 reflected in applications, what's the cycle
6 exactly.

7 So we looked really at 2011 as the
8 last year where you had the ability to get that
9 type of protection, and 2012 was the first year
10 where you couldn't, at least for most of the
11 year. And so we started to look at that
12 difference.

13 But there might be more lagging going
14 on. There's all kinds of issues with using CPC
15 based or class based identification which is what
16 we did. We still think that's the best approach
17 that's available but it's, you know, hard to say
18 that these are perfect groups.

19 And as we heard earlier, there's gaming that
20 goes on to get your application into one or
21 another group. And so that's going to cloud the
22 analysis. Next slide, please.

1 And so with those caveats in mine, the
2 let's just look at these questions and what we
3 figured out, and I'll just kind of jump to the
4 conclusions given the amount of time that I have
5 left.

6 So the first question about whether we
7 could measure decline or not. Next slide. We
8 looked at, if you go to the next slide, patent
9 filings through 2014, the end of 2014. We chose
10 that because you have this 18 month lag, and so
11 that was kind of the full last period where we
12 were pretty confident that we saw the patents.

13 Even that's a little bit problematic
14 though because you have non-publication requests.
15 So certain applications that may never make it
16 out of the Patent Office or may not make it out
17 for a lot longer. So that number is going to be
18 a little bit depressed.

19 But what you see on your slide here on
20 the left is the core DX applications. And you do
21 see that there was a decline in 2012. We think
22 that hit happened, we need to look more

1 granularly at the months. But we think it did
2 happen in the latter half of the year.

3 But then a bit of a recovery where the
4 applications started to rise again. It looks
5 like they've fallen off a little bit at the end
6 of 2014. But again, we don't know how much of
7 that is truncation.

8 When you look at the pure technology
9 enabling applications in this space, our control
10 group, you do see that they registered a more
11 steady increase before leveling off or declining
12 a little bit in 2014. Next slide, please.

13 And so what you could say is that in
14 both cases, you know, applications are up,
15 they're growing, but that the pure kind of core
16 diagnostic applications have grown more slowly
17 than the tech enabled applications.

18 And so while one has increased eight
19 percent since 2011, that's the tech enabled
20 applications, the core diagnostics applications
21 have only grown at a rate of three percent.

22 So if you go to the next slide, you'll

1 see sort of our bottom line here which is that
2 there is no real clear decline due to Mayo. And
3 I'll go through the rest of it in the comments.

4 So going to the next slide, in terms
5 of material transactions, and then the next slide
6 after that you'll see that transactions have gone
7 up dramatically since 2011. So we think that
8 that's evidence of robust activity there.

9 Going on the next slide, and the next
10 slide in terms of the actual scope of protection,
11 we do find that there has been some narrowing
12 there. And the slide before shows the kind of
13 length of the first claim.

14 But the first claims for core DX
15 applications are longer. They're about 12
16 percent longer whereas enabling tech applications
17 are only two percent. Thank you.

18 MR. HANNON: Great, thank you. Our
19 next panelist is Michelle Fisher.

20 MS. FISHER: Good afternoon. My name
21 is Michelle Fisher and I'm a CEO and Founder of
22 Blaze Mobile. First I wanted to thank the US PTO

1 for hosting this round table, for your spirit of
2 collaboration, and soliciting feedback from the
3 public, especially having the Q&A this time to
4 compliment the session that you had in
5 Washington, DC.

6 I also wanted to compliment you on the
7 refresh rate of the guidelines. I think the
8 speed and quality has been impressive and helpful
9 at least in our case.

10 I'm here to represent the small
11 inventor, small business perspective today. And
12 I started my company 11 years ago, Pre-Alice and
13 its software and its payments. So we're sort of
14 right in the middle of the storm.

15 And my experience and what some of the
16 challenges that we found is that examiners aren't
17 reading the guidelines. And in one case, the
18 examiner actually didn't read the past three
19 guidelines before making an examination.

20 And so, you know, I think it's awesome
21 again as I mentioned that you guys are spending
22 the time and resources to hold these round tables

1 to solicit feedback, to publish new guidelines
2 which incorporate new court cases.

3 And then all of us are here also, you
4 know, soliciting, providing feedback and trying
5 to understand it and apply it to our patents.
6 But when examiners aren't investing the time as
7 well, it hurts the process.

8 So as a result, these 101 rejections
9 have an impact for both the US PTO in terms of
10 spending time issuing rejections that aren't
11 justified spending time or money, as well as in
12 opportunity costs, that time that was spent on
13 issuing a false rejection could have been spent
14 on an application that's in queue for example.

15 For inventors such as myself, the
16 baseless 101 rejections have a lot of
17 implications, some that are apparent and some
18 that may not be apparent.

19 First, obviously it's costly in terms
20 of the expense for filing response as well as the
21 US PTO fees, tens of thousands of dollars. It's
22 time consuming. And then for small businesses,

1 it's an additional burden to actually have to
2 file a response to a rejection that's not
3 warranted.

4 It represents an opportunity cost on
5 many levels for small business. First there's
6 lost revenue associated with not having a patent
7 that you can assert. There's a direct impact to
8 lack of venture funding because not only do you
9 not have the patent, but you can't assert it.

10 And for companies that are led by
11 women and people of color who actually receive
12 less than five percent, 0.3 percent respectively
13 of venture funding, it makes the playing field
14 even more unlevel.

15 For small businesses who represent
16 roughly 50 percent of the working population,
17 about 120 million individuals. Small businesses
18 also have generated over 65 percent of new jobs
19 since 1995.

20 And so when small businesses are
21 burdened with additional costs associated with
22 getting patents and protecting their products,

1 it's actually bad for the economy.

2 Last but not least, it makes it
3 challenging to stay competitive while large
4 corporations with deep pockets continue to
5 benefit from the innovation of small companies as
6 well as innovation of not only my company but
7 other companies who are in some cases eclipsed by
8 the large corporations.

9 So I have several recommendations to
10 mitigate this problem. First obviously, the
11 examinations for 101 shouldn't be untethered from
12 the guidelines which we all spend so much time
13 and hard work putting together. It's not
14 optional reading.

15 And then I feel like if an examiner is
16 issuing a 101 rejection that doesn't incorporate
17 guidelines, then it should be vacated. That's as
18 plain and simple as that.

19 Perhaps publishing a summary of all
20 the guidelines, there's probably been about four,
21 half a dozen since Alice came down, maybe in one
22 document would make it easier for the examiner to

1 go through it.

2 Similar to 103 rejections, and 102,
3 the 101 rejection should include reasoning, not
4 just a list of court cases. Instead of awarding
5 points to examiners for making rejections which
6 drives sort of the wrong behavior, perhaps
7 penalizing examiners who aren't actually sort of
8 following their rules.

9 And then last but not least, perhaps
10 training examiners or exposing them to the real
11 hard costs associated with filing applications,
12 filing RCEs and appeals, both in terms of the
13 legal costs and the costs associated with the
14 Patent Office.

15 So in summary, you know, I wanted to
16 again thank you again for providing this forum to
17 solicit feedback on what's a very important issue
18 for small businesses such as myself.

19 MR. HANNON: Great, thank you. Our
20 next panelist will be Patrick Giblin.

21 MR. GIBLIN: Hi. Thank you very much.
22 I am honored to be here, and I truly am the small

1 entrepreneur. We are a very small startup that's
2 had the fortune of being able to have a number of
3 patents issued, and I'm here to speak to that
4 audience on both ends of what it means to us and
5 what we think is kind of important moving
6 forward.

7 So please go to the next slide. I
8 want to tell you who I am. I'm an inventor with
9 five US Patents. They're involved with
10 artificial intelligence, machine learning, and
11 natural language processing.

12 In sort, we read comments and reviews
13 on all content and create better search, content
14 recommendation, and ad tech. So there's some
15 very big companies that everyone knows that
16 obviously are in our footprint.

17 I'm a geek, I love databases and
18 computers and I have no formal computer science
19 or computer engineering. That puts me at sort of
20 a detriment at times to some people. I'm a law
21 school dropout, flunk-out. So I get the law.
22 You know, I made it through first year and I said

1 I'm out of here.

2 That was something my parents are
3 still wondering about. Again, founder of an
4 artificial intelligence and machine learning
5 that's for comments, and I've already spoken to
6 that.

7 I'm broke. I'm raising funds every
8 day, you know, and trying to survive every storm
9 that comes my way. I owe \$892,000 and counting.
10 If you're an investor, I would like to talk to
11 you.

12 I build as fast as I can. I mean,
13 that's what you do as an entrepreneur. That's
14 what you do as an inventor. And I sleep on
15 couches because sometimes that's all I can do.
16 My life sucks but I love it.

17 I don't work for the money, I build a
18 dream. Next slide. I think those are important
19 matters to discuss because it's really what's
20 important about the patent system and where there
21 is some failure I think.

22 You know, we're here to talk about

1 eligible subject matters for patents which is the
2 step one. You know, and there's case law and
3 it's like okay, am I back in law school as I was
4 reading this or is this about theory.

5 And what I really realized and
6 remembered was that the law is really, it's not
7 black and white, it's gray. And inside of that
8 there's always interpretation that we had each
9 way. There's four cases that everyone's
10 referencing here today, and I'm going to default
11 to the fact that much wiser people are making
12 those decisions.

13 I'm here to help give understanding to
14 what we can do to make the process maybe a little
15 bit better and more aware to all spectrum inside
16 of it because I think there's a number of people
17 that are influencing and controlling this.

18 I do believe in the steps, you know,
19 is it obvious, is it unique, and is it useful.
20 And I think it's time that we start protecting
21 people who are doing very good things. Next
22 slide, please.

1 I believe in patents, and the reason
2 is they're important. They protect inventors,
3 and that was what the real purpose was when they
4 first established the patent and trademark
5 office.

6 You know, it's David versus Goliath in
7 many ways, big businesses versus inventors. The
8 first major issue with patents was during the
9 industrial revolution, and I kind of call it
10 civil war, you know, it was the second civil war
11 where there's a lot of battleground going on in
12 the American economy.

13 And now we're in the technology
14 revolution which is the third civil war of this
15 great nation of ours that's built around
16 inventions and freedoms and ability to do things.

17 It's redefining subject matters,
18 right? There's new worlds. Protect them, honor
19 them, help build for inventors and not for big
20 business. That's what's important.

21 Trolling sucks. I mean, see lawyers.
22 That's who's doing this. This isn't inventors.

1 It's a bad platform. No inventor starts as a
2 troll, I guarantee you that. We all are building
3 a dream. We're all struggling to get something
4 going.

5 So try and help protect them and think
6 of them, you know? We're beat down with bad
7 things and partners and this has got to stop.
8 Extend the rights maybe, increase fees for
9 wrongdoing. Make it hurt when people violate
10 patents or when trolls do wrong with patents.

11 They know what they're doing is wrong.
12 And cap money after years rather than the life of
13 the patent itself. Why does an inventor not be
14 able to carry that along in his lifetime when so
15 much has been put into it? What's wrong with
16 that?

17 Again, let people have reasons to
18 invent. Next slide, please. You know, I do
19 believe this becomes lawyers versus inventors.
20 You know, a lawyer's job is about cost and hours
21 billable. It's a greed formula.

22 You know, do we fight it or do we buy

1 it. Can we cut around this without paying for
2 it? Can we beat them with our war chest. How
3 does the logic work here. Cost management, is
4 that really what invention is supposed to be
5 about? But that's what it is.

6 Inventors are usually doing it for the
7 good. I have an idea. I want to build this.
8 Please help, I need money, I need team, I need
9 framework, I need a chance. And that's kind of
10 been lost in this whole process in my opinion.
11 Next.

12 Strength and speech should not always
13 win, big business focuses on that. They've got
14 big war chests, lots of lawyers, lots of
15 engineers and they just kind of work around
16 things. And that's tough. It's really tough to
17 be a startup in that ecosystem.

18 And it does it too often. You know,
19 inventors are trapped and held under water, and
20 this pain is real. The things that we hear from
21 venture capitalists which has been spoken of
22 already today as well as big business that just

1 doesn't really honor the people who have invented
2 things ahead of them.

3 That's a real problem that needs to be
4 addressed inside of this system of how things are
5 relevant and how they're approved. Once you get,
6 you know, the process is slow as I've spoken to,
7 but once you get your patent issued there's,
8 like, this celebration.

9 And then all of a sudden you realize
10 oh my God, I've got to defend this. I need more
11 money. I mean, that's a terrible way for it to
12 kind of go. And that's part of the system I
13 think that has to be addressed as well inside of
14 what we're trying to accomplish here today
15 regarding what subject matter is relevant. Next
16 slide, please.

17 So this goes back to new questions to
18 consider. Does subject create a market
19 opportunity or condition? You know, what is the
20 intent of the owner within the subject that
21 they're trying to create. What is the intent of
22 a litigator inside of, like, why this is or isn't

1 working from a case law standpoint moving
2 forward.

3 It's about who wrongs who, you know,
4 why are we here. Is it good or is it greed? And
5 if there is a subject matter that should be
6 considered, we really have to start opening up
7 the ideas and the parameters around that because
8 the world has changed significantly. Next slide,
9 please.

10 It's the speed of technology. That's
11 a lot of what's been spoken about today. Look at
12 how much has been invented via the web since the
13 mid-1990s. There's a ton of content and software
14 and other things that are very important and they
15 should be recognized and they should really be
16 addressed.

17 We must be protecting those that are
18 inventing. These are new, eligible subject
19 matters for patents. Discover them, label them,
20 protect them. You know, speed causes more pain
21 and we have to address that. How does the big
22 business allow themselves to stand in front of

1 all this. Next slide, please.

2 You know, software as a service is the
3 new hardware. The software is a modern goldmine.
4 There's Bitcoin, there's big data, there's
5 machine learning, artificial intelligence, human
6 engagement, all of this is important for us to
7 define as subject matter and to recognize that
8 there's people building very, very useful
9 applications inside of there that need to kind of
10 make sure that their position is protected in my
11 opinion.

12 It's a new economy. Protect the
13 property or we're going to have, you know,
14 there's going to be a lot of civil suits and
15 financial unrest that will begin to take over.

16 Next slide.

17 Help the good, crush the evil. Thank
18 you.

19 MR. HANNON: All right, so our final
20 panelist today is Kim Rubin.

21 MR. RUBIN: Welcome to Silicon Valley,
22 the new automotive innovation capital of the

1 world. Today in the Valley there are eight
2 companies developing a coal powered car. Come
3 on, guys, that was funny.

4 (Laughter)

5 MR. RUBIN: Though there's no such
6 thing as a software patent, who am I? I have a
7 degree, I have experience, I've done startups, I
8 have a heap of inventions, I'm a patent agent, I
9 have a pretty good selling book on Amazon for a
10 book on patent law. And I have a bookshelf for
11 patents, and I have two file cabinets. There
12 they are.

13 I have to keep track here. So there's
14 no such thing as a software patent which I'm
15 going to try to prove to you in the next seven
16 and a half minutes, judges issue opinions,
17 computer scientists generate proofs.

18 There's no such thing as a rubber
19 patent. We're waiting for slides. We're using
20 PDFs. There we go. So I'm going to speak to you
21 today in plain English. No French, no Latin, no
22 legalese. And I'm going to leave citations as an

1 exercise for fourth year law students.

2 So we're going to start at the
3 Constitution. We missed a slide, but that's
4 fine, Nadine. Stay there. So there's no such
5 thing as a software patent. There's no such
6 thing as a rubber patent, there's no such thing
7 as a steel patent, there's no such thing as an
8 electricity patent. There are only patents.

9 And everything that I'm going to talk
10 about today is firmly rooted in the law, starting
11 with the Constitution, Article 1, Section 8,
12 Sentence 8, "To promote the progress of science
13 and useful arts by securing a for limited time
14 for inventors the exclusive right to their
15 discoveries."

16 Right. So I reread the Constitution
17 several times. I cannot find the exemption for
18 software. If you prefer your law a little more
19 current than the Constitution, we have 1952 where
20 Congress said statutory subject matter includes
21 anything made by man under the sun, which I
22 consider narrowing of the Constitution, but

1 that's what Learned Hand said.

2 So jumping forward to 2011, the AIA.
3 Okay, here is the only text in the AIA regarding
4 patentable subject matter. Apparently none of
5 you find those things useful. All right.

6 So is software not a thing? Is data
7 not tangible? Okay, so everybody in this room
8 that does not own a cell phone and has never used
9 a computer, raise your hand. Okay, great
10 audience participation.

11 All right, so back to the
12 Constitution. The key word here is useful.
13 You'll notice there are no other limitations. It
14 doesn't even have to be a thing. It only needs
15 to be useful.

16 So I used to tell my engineers don't
17 call it a computer. Okay, the meaning of the
18 word computer is so broad that the word itself is
19 meaningless. Okay, computer is directed to
20 everything from an abacus, a loom, logic, and
21 your microwave, control of a 787 Dream Liner to
22 the search for life on an extraterrestrial

1 planet.

2 So a computer is just a grammatical
3 placeholder. It's like the word device, it has
4 no actual significance. But if you don't have a
5 computer and you don't have a computer program,
6 what you do have are method steps.

7 So we're going to look briefly at the
8 contours of method versus algorithm versus
9 process. Okay, now we know that processes are
10 patentable, it says so right here in the MPAT.

11 So let's look at the experts, how the
12 experts say about processes. So you know, here
13 are process, true love, a whole life, and my
14 favorite, fighting monsters said by an old law
15 professor. So clearly, a process is patentable.

16 On the other hand, algorithms,
17 computer programs, software. So for example,
18 algorithms for data encryption, DES, Diffie
19 Hellman, public key cryptography, RSA, okay, I
20 can't imagine anything less a thing than
21 multiplying the first prime number you see there
22 by the second prime number. But that's exactly

1 what Diffie Hellman does.

2 But without these mathematical
3 algorithms, we would not have the most important
4 technology developed in the past 40 years. There
5 would be no web, no ecommerce, and no electronic
6 privacy.

7 So clearly, mathematics, numbers, and
8 software fail the useful test under the
9 Constitution, right? Well, we can always use the
10 prior art for ecommerce, we can trade seashells.
11 Ah, but you say we have to have significantly
12 more. That word's come up a lot today.

13 So the question, exactly how large
14 does a prime number have to be in order to be
15 significant? Now most of you multiply two times
16 three by the third grade. So all Diffie Hellman
17 does is use larger numbers. So exactly how big
18 does a prime have to be before it's significant?

19 So to summarize, processes are
20 patentable, okay, and algorithms are not. Okay,
21 so a little less sarcasm, but determining the
22 differences between methods, algorithms,

1 processes, and software is like parsing clouds,
2 fluffy.

3 But I didn't come here today to whine,
4 I can do that at home. I have a solution. Okay,
5 and the solution is in the form of a flow chart.
6 MPEP loves flow charts. Okay, so here's mine.
7 First, is it abstract. And as every examiner
8 knows, and you're going to find out in your first
9 office action, yes.

10 In fact, the recent district court
11 just gave up and said assume abstract, which if
12 you're a prosecutor you're there. Next step, is
13 it novel. If not, reject it.

14 Next step, is it non-obvious? If not,
15 reject it. Okay, you're done. It's a patent.
16 Oh, but what happened to 112? Okay, you're
17 right. Let's look at the disclosure. Is it
18 full, clear, precise, and exact? If not, reject
19 it.

20 So there you have it, examining a
21 software patent application in three steps, is it
22 clear, novel, and non-obvious. If yes, it's a

1 patent, and this is how you examine all software
2 patent applications.

3 In fact, this is how you examine all
4 patent applications. Oh, but Kim, you say what
5 happened to 101. Okay, so back we go to 101. Is
6 it patentable? Well then it adds significantly
7 more to the art. If it's not patentable, it does
8 not add significantly more to the art.

9 Okay, it's simple, 101 is just form
10 paragraphs as it ought to be. Okay. So by the
11 way, this flow chart, this simple three step
12 algorithm is totally compatible with supreme
13 court opinions and Director Lee's outstanding and
14 completely ignored guidelines.

15 So there's the court case, new and
16 better, 102 and 103 are used by the court to
17 determine 101. Okay, there's no such thing in
18 seven and a half minutes.

19 All right, one last point that's key.
20 Software methods have code. I prefer to put it
21 in Claim 1. If you can execute Claim 1, probably
22 you mute 112. If you don't have code, you have

1 an idea, not an invention.

2 Okay, too much detail. So I'm out of
3 time, but I'm going to leave on a note of humor.
4 Okay, how many Supreme Court Justices can dance
5 on the head of a pin? All right, and the answer
6 is you all know is an even number.

7 All right, I have one more joke, but
8 we're going to have to leave that for Q&A.

9 MR. HANNON: Great, thank you. So
10 I'll start out with a question, I guess, for the
11 independent inventors on the panel. And I would
12 just ask how have your filing practices changed
13 after, in the wake of Alice? How has that
14 shifted things for your businesses?

15 MR. GIBLIN: I mean, I can begin. You
16 know, it's more difficult for us today. I work
17 with one of the biggest and best firms I think in
18 the world, the DLA Piper, and there's a hesitance
19 from their side because the investing it takes on
20 both ends from the legal side, the lawyer's time
21 as well as mine.

22 Also just kind of building what's

1 called the picket fencing around your IP has
2 become a little bit less of a recognized ease. I
3 mean, there's a lot of ambiguity in what that
4 means to me with that until our technology is
5 challenged against it. Right? So we've kind of
6 slowed down, for lack of a better word or term.

7 MR. RUBIN: So I developed a 15 page
8 response to the first office action using
9 extensively the guidelines and the case law that
10 I file almost the same argument on every single
11 first office action.

12 I've gotten 101 rejections on
13 mechanical devices inside of vending machines.
14 And so half the time, the examiners just give up
15 and move on to substantive examination. The
16 other half of the time they just say, you know,
17 Applicants arguments are not compelling with no
18 argument, and they go eat lunch.

19 But I do now try to draft claims
20 basically isomorphic to the patentable subject
21 matter. You know, I try to take those claims and
22 substitute words for my client's invention and

1 then hopefully that's going to be compelling.

2 Not always. You can probably count
3 the number of examiners that actually know the
4 guidelines on one hand.

5 MS. FISHER: Yes, I would just echo
6 the other panelists. You know, pre-Alice, we
7 would at least, I know in the law firms that I
8 work with here in Silicon Valley the advice was
9 to limit disclosure in your patent applications
10 11 years ago because otherwise, you know, if
11 you're putting the secret sauce in your patent
12 application, you're pretty much creating a
13 blueprint for your competitors to follow to
14 create products.

15 MR. RUBIN: Which I'll say is the
16 whole point of a patent is to disclose best way
17 and enablement. So I'm a big believer in having
18 code. I prefer python. I actually write Claim 1
19 so it's executable. You know, maybe Amazon and
20 Google could loan some computers to the Patent
21 Office and the examiner can execute Claim 1 I
22 think it may meet 112.

1 MS. FISHER: So as I was saying --

2 MR. RUBIN: Oh, sorry.

3 MS. FISHER: As I was saying, 11 years
4 ago the advice was to limit disclosure so that
5 your patent application doesn't become a
6 blueprint for product development for your
7 competitors in the best case. In the worst case,
8 a way to reengineer around your idea.

9 And so obviously nowadays the idea is
10 to put more into your patent application. And so
11 you risk, you know, spilling more of the secret
12 sauce. That's kind of the short answer.

13 MS. KUHN: This is Sharon Kuhn in
14 Dallas. I just wanted to speak --

15 MR. BAHR: I heard a lot of comments
16 about examiners not applying the guidance. So
17 would you say the problem more is that there
18 should be a legislative or some sort of change to
19 the law, or that we really need to do just a
20 better job of getting examiners to follow the
21 guidance?

22 MS. FISHER: I think the latter. I

1 mean, obviously the more elegant approach, cost
2 effective and time efficient approach is just to
3 get those examiners to follow the great
4 guidelines.

5 I mean, I've been prosecuting my own
6 patents for the past five years. And so to see
7 the speed at which you've been issuing guidelines
8 and incorporating the court cases actually has
9 been wonderful from my perspective.

10 If we just had the examiners follow
11 that, that's sufficient.

12 MR. RUBIN: Yes, I don't think that we
13 need a legislative solution to that. I would
14 sure like to see one on patent trolls and the
15 litigation and a bunch of other things that are
16 kind of broken on the litigation side. You know,
17 we're not going to get any legislation anyway.

18 But I think the Patent Office can
19 really solve this problem I think between
20 training and motivating examiners properly.
21 Examiners don't even know now, you know, how many
22 of their rejected applications are appealed.

1 It's not even available information.

2 I've had supervisors tell me that
3 they're prohibited from supervising senior
4 examiners. I've had examiners whine bitterly to
5 me that they're not even in the right art unit.
6 So I think doing some restructuring of how
7 examiners are trained and motivated would go a
8 long way.

9 I think the guidelines are great. I
10 think the examiners are just not examining. And
11 you know, the Patent Office is a profit center
12 for the US Government, and you've got customers
13 standing in line three years holding money over
14 their head.

15 Some of them are holding \$4,500 spiffs
16 and yet, you know, you're not serving those
17 customers. And you could.

18 MR. HANNON: Thank you.

19 MR. GIBLIN: I mean, just to add to
20 that --

21 MR. HANNON: I'm sorry.

22 MR. GIBLIN: No, it's okay. I was

1 very fortunate to be able to be represented by
2 someone who has filed, you know, thousands upon
3 thousands of patents.

4 And my interview with the examiner was
5 much more streamlined because she knew the
6 questions to ask, which was also, you know, so
7 the guidelines were kind of there and she was
8 able to navigate that.

9 And what I guess I'm saying to you
10 within the guideline issues, and what I think I'm
11 hearing from Michelle as well is I think more
12 transparency, right, and more just awareness of
13 really what's going on will add to a lot more
14 deal flow for lack of a better word because I
15 don't think the Patent and Trademark Office wants
16 to get into deal flow counting.

17 But you know, that would matter. I
18 think that would be very important and helpful.
19 I don't think that has to come with legislation
20 from outside but maybe just with the transition
21 inside the patent end to end result.

22 MR. HANNON: Thank you.

1 MR. KRAUSE: Professor Chien, I don't
2 know if you saw but the panel before lunch was a
3 bunch of life sciences people saying it's the end
4 of the world because of diagnostic methods not
5 being as patentable as they were after Mayo.
6 What do you think they would think, and some of
7 them are still here, of your presentation?

8 MS. CHIEN: Well, I think that it's
9 important and I think that those folks would
10 agree that any policy decision should be evidence
11 based. It should be based on a state of what's
12 actually happening.

13 Now what I can see from looking at the
14 whole scope of patents and transactions is
15 different from one individual company can see
16 from their own docket and the patent rejections
17 they're getting back.

18 But I did hear some consistencies in
19 what was discussed, and I actually talked to a
20 few folks as well during the break.

21 What I think is consistent is that
22 there is still innovation happening in these

1 areas right now. And overall I think there is
2 also a difference in this sector particularly
3 because it's so heavily dominated by non-profit
4 patenters and patent applicant, people are
5 applying for patent applications.

6 So in some of the slides I didn't get
7 to, I show that over 50 percent of patents are
8 applied for by entities that make less than \$10
9 million. And a lot of that is public entities
10 like University of California or others.

11 And so those folks are not as
12 particularly I think dependent on patents. So
13 overall they might be increasing the numbers of
14 patent applications, you still might be seeing a
15 lot of pain in certain sectors and I think that's
16 worth teasing out a bit further as we go and look
17 at the data.

18 But another thing that we've seen is
19 not only are the patent applications still rising
20 to some degree, maybe not as much as they would
21 have in a different world, but that the
22 protection is narrower and that is consistent as

1 well with what I heard earlier on the panel,
2 especially the questioner from the PTO.

3 So those things I think actually are
4 consistent. The question again is though looking
5 beyond what we have in this data and try to look
6 at what's the saying about the next generation of
7 companies, something we've also heard during our
8 interviews is that IP centric business models are
9 not going to be viable anymore but that doesn't
10 mean that innovation isn't still happening. It's
11 just happening in different ways.

12 And then what we do with that is a
13 question I think for all of us to consider.

14 MR. RUBIN: Can I comment on that?
15 The question about life sciences, you know, I
16 want to point out the Constitution actually uses
17 the word discovery, that inventors can have
18 discoveries which I think is directly related to
19 life science patentability.

20 But you know, on that topic, I would
21 really strongly encourage looking at what other
22 countries do, you know, Korea, China, EPO in

1 particular. I think that they've got a very
2 strong grasp on the idea that if you have a
3 discovery, the discovery itself is not
4 patentable, but if you apply it then it is.

5 And I think that really captures the
6 essence, and so I would really encourage looking
7 at consistency with the way the international
8 community deals with life sciences.

9 MS. CHIEN: If I can just weigh in on
10 that because I think it's a really important
11 point that was brought up earlier as well several
12 times with the idea that we should really make
13 sure that, especially on a diagnostic side, we
14 need to look at other countries and try to
15 calibrate eventually to those standards.

16 And there is a difference now. We
17 also measured and seeing that some EPO patents
18 were broader than the ones that the US
19 counterparts got.

20 But I think that the question for us
21 as a country is about innovation and the price
22 that we're paying for it and whether that's

1 happening. So if a company is innovating because
2 it can get patents in Germany or in Europe but it
3 may not be able to get as much protection in the
4 US, that innovation is still happening.

5 And so if our consumers can benefit
6 from the additional competition that a lack of
7 patent production provides and pay lower prices
8 here, but this, the innovator can still get their
9 investments recouped by getting monopoly profits
10 elsewhere, I don't necessarily think that's a bad
11 deal for our consumers.

12 And we know that the price of
13 healthcare is something that there's been a lot
14 of attention on. So I think that generally
15 speaking, we need to be thinking not only from
16 the perspective of an individual's company and
17 preserving a particular business model but more
18 generally about this innovation and making sure
19 we have the correct incentives.

20 MS. PERLMUTTER: Just to follow up on
21 that point, so Professor Chien, do you think, one
22 question I had as I was listening to some of the

1 discussion about different standards and
2 different countries, on a prior panel someone
3 made the point that if there's protection in
4 other countries but not in the US, that one of
5 the consequences might be that you could no
6 longer rely on trade secrets or patent protection
7 in the US because the disclosure in other
8 countries would eliminate the possibility of
9 having trade secrets protection here.

10 So one question I had is do you think
11 there is any danger that the result of differing
12 standards internationally might be that US
13 businesses would rely more on trade secrets
14 protection leading to less disclosure.

15 MS. CHIEN: Yes, that's a really good
16 question. I think that's fairly complicated, and
17 it would depend on the situation. I would say,
18 for example, I was just in Utah where myriad has
19 been in the profile think of all of us, we've
20 understood that they had protection and then lost
21 it.

22 But because they were first to market,

1 they had a lot of data and they were able to use
2 that kind of trade secret protection to be a
3 market leader and continue to have that. People
4 would still buy their product even though it was
5 more expensive because if you're going to make a
6 decision about having a mastectomy, you're going
7 to want the data provider or the diagnostics
8 company that actually has all the information
9 about all the different mutations and all the
10 variations that are out there.

11 But I think over time their advantage
12 will erode. So this is probably a long winded
13 way of saying it's a really good question. I
14 don't have the answer. I think it's going to
15 depend on a particular business.

16 MR. RUBIN: Yes, lack of conformity on
17 life sciences with other parts of the world is
18 definitely a problem in the US. I mean, I have
19 friends that work in that industry. And you
20 know, it's a serious issue to have companies that
21 aren't protected in the US. So yes, it really
22 matters a lot.

1 MS. CHIEN: I will say one thing that
2 surprised us in terms of thinking about this
3 question of other countries and domestically. I
4 think one of the biggest, again I think I said
5 this earlier, the biggest issue for these
6 companies in terms of getting compensated really
7 is reimbursement rates right now that are very
8 compressed.

9 So even if you can get a great patent,
10 you can get a great product, if you can't get
11 somebody to pay for it, that's a big problem
12 right now for the industry and I think that's
13 where there's been a lot more focus, frankly.

14 MR. HANNON: I understand we have some
15 comments from Dallas. Ms. Kuhn, if you're able
16 to make your way to the microphone there and
17 share your views with us.

18 MS. KUHN: Well, I think the issue I
19 wanted to speak to is one of the questions was to
20 the independent investors, how has your practice
21 changed since Alice.

22 I am actually an inventor at my

1 company as well as being their chief IP counsel
2 one of the ways that we have had a lot of success
3 is we file as a small entity, and we have used
4 Track 1. And by both, by using Track 1 for our
5 patents, we have been able to significantly
6 increase the speed at which we're getting patents
7 to issue.

8 I think we started in, when I first
9 started working for Mattersight as outside
10 counsel in 2011, they had one patent issued and
11 one about to issue the day I had my first
12 meeting. And then since then we've had 29 more
13 patents issued, and we're, you know, looking to
14 keep that pace going.

15 I think that Track 1 has a tremendous
16 advantage for software companies because I think
17 actually Track 1 has a tremendous advantage for
18 everybody because if you have a shorter period of
19 time that passes in between each office action,
20 you don't have to go through this reeducation
21 process with the examiner.

22 The examiner only has so much time

1 really to look at each office action and take his
2 or her next step. And if he worked on your
3 application just a couple of months ago, he or
4 she will remember everything that happened. And
5 that just has been tremendously valuable to us.

6 So we've had a lot of success in that,
7 and I would say if you're struggling here and if
8 you're in an industry where the lifespan of your
9 current product or the product you're trying to
10 cover is shorter. I think a lot of the biotech
11 industry, you're looking maybe a longer lifespan
12 so you're maybe not needing to file under Track
13 1.

14 But like I said, we've had tremendous
15 success under Track 1, and it has really
16 highlighted the differences that are in certain
17 art units versus other art units where with
18 certain applications and certain art units, we
19 are having our fourth or fifth set of claims
20 issued for patent.

21 We will have another patent that we
22 consider to be just as technical and just as

1 innovative that will be on its third or fourth
2 request for continuing examination.

3 So we've had both success for Track 1
4 and I recommend Track 1, but I also say that it
5 has really highlighted kind of the unevenness of
6 the application of the standards.

7 And quickly I would like to speak to
8 whether or not there should be a legislative
9 solution. I don't think we're currently at the
10 time for having a legislative solution.

11 Keep in mind that after KSR, the KSR
12 decision issued, there were several years of what
13 you really can only call churn where district
14 courts and the federal circuit were working out
15 how that standard was actually going to be
16 applied.

17 We're still in that churn period I
18 think for Alice. And I think the churn period is
19 actually going to be longer than the KSR period,
20 mostly because there is less applicable case law
21 for us to kind of draw on for examples.

22 But I mean, with obviousness, there

1 were decades of case law analyzing components of
2 the business analysis, we just don't have that
3 kind of prior case law to look back on for
4 Section 101. Those cases are very few, were very
5 few and far between prior to Alice.

6 So I think we're still in the churn
7 period. We're still not at the point where we
8 know whether or not legislative solutions can be
9 appropriate. Thanks.

10 MR. RUBIN: I would like to add speed
11 is great. But the Track 1 people are all butting
12 in line in front of my clients that can't afford
13 that. And so it doesn't ultimately benefit
14 everyone. It just benefits the people who, you
15 know, have more money.

16 MR. HANNON: Do the other panelists
17 agree with the concept that we might be in this
18 sort of post-Alice churn where things are still
19 somewhat volatile and they will eventually settle
20 down?

21 MS. FISHER: Yes. I mean, I think
22 from my perspective we're in the next chapter in

1 terms of trying to enforce the patents that we
2 have. And so unfortunately, Alice is
3 retroactive, right? So even if you filed your
4 patent ten, five, ten years ago, and you were
5 sort of adhering to the advice of your attorney
6 to limit disclosure.

7 You know, you're still obligated to
8 point out improvements to a technical problem.
9 And so to the extent that you have that in your
10 patent application that was written five, ten
11 years ago, that's great. But if you don't, then
12 you're penalized for that, right.

13 In hindsight it's 20/20 vision. One
14 way to address that problem, I was listening to
15 some of the panelists earlier today and what's
16 interesting to hear both small and large
17 companies talk about the fact that, you know,
18 they don't like to be held accountable for paying
19 for patents from companies that really weren't
20 involved with inventing the idea.

21 And so there was a comment there
22 should be evidence, you know, provided by these

1 companies that they were actually involved in the
2 invention. So as I was sitting here waiting to
3 come up I thought well what's one good way to
4 address that problem.

5 And the only parallel that I can think
6 of is with regards to 102 or 103, if you have to
7 provide proof pre AIA, first event, there are
8 procedures in the MPEP that call for reduction of
9 practice which includes a business plan and
10 product and testing.

11 Well, why not apply the same
12 procedures to 101? And so it's pre-AIA, first to
13 invent. And so if you didn't have that
14 information in your patent application, perhaps
15 it was available in your product engineering
16 functional specifications, not a patent spec but
17 a functional specification, or your engineering
18 inventor's notebook or source code.

19 So sort of leverage all the things
20 that you probably already have internally as your
21 company, or as your building your product that
22 you didn't put into your patent application

1 because you wanted to protect your idea, and use
2 that as a vehicle for mitigating abstractness
3 because right now abstractness is basically a
4 euphemism for broad claims, and that's not fair
5 for people who ten years ago saw a void in the
6 marketplace and created a product and wanted the
7 product to have the broadest appeal to their
8 consumer base and decided to patent that. So
9 they shouldn't be penalized as a result of it.

10 MR. GIBLIN: I mean, from our
11 position, we're just waiting for the storm, I
12 mean, with what Alice is going to mean to what we
13 were because our patents were written pre-Alice.

14 We feel that based upon what we've
15 looked at and based upon advice from counsel at
16 DLA that we're still in a very strong position
17 because of just being forward thinking about it
18 in regards to how software really would be seen
19 or looked at and what we really do.

20 But ask you ask about, I think the
21 question was are we in hesitation mode or we on
22 pause. I'm definitely on pause. You know, the

1 cost of time, effort, money, and mystery is
2 really a preventative. So I'm going to continue
3 to build what I have to see what's next.

4 MR. RUBIN: So, you know, Alice in
5 Wonderland is just complete fantasy as, you know,
6 the very first panelist we had here today and a
7 lot of other people have pointed out, you know,
8 has no basis in the Constitutional law.

9 But I mean, it has some good things
10 going for it which is that it's a fabulously
11 blunt tool to get rid of 10,000 really bad
12 patents that never should have been issued. You
13 know, so that's a good thing.

14 But all those awful patents would fail
15 102 and 103 and 112 if anybody bothered to look
16 at that. I mean, the intel's example of the cup
17 behind the piece of paper, I mean, all the
18 examiner had to do is clip a renaissance painting
19 to the back of the office action and you would
20 see things that are hidden, aren't presented.

21 And you know, Amazon's complaint about
22 having a flying object deliver packages, I mean,

1 seagulls are prior art on that. If it's really
2 an ancient human activity, I mean, an examiner
3 can't find an example? It's just nuts.

4 If it's all those easy things, then
5 why not just have the examiner come up with
6 something and attach it and generate a 102
7 exemption. And so, you know, those huge bad
8 patents that are out there, 10,000 or more, I
9 would like to see those get rejected under
10 traditional rules and then sort of let Alice
11 peter out under its own foolishness, this kind of
12 giant dragon that it is.

13 MR. HANNON: All right, I think on
14 that note, unless there's another question, no?
15 We'll go ahead and end this panel before we bring
16 up the next and last panel. So thank you.

17 (Whereupon, the above-entitled matter
18 went off the record and resumed following a brief
19 recess.)

20 MS. PERLMUTTER: Welcome to our last
21 panel of the day. We're going to start as our
22 first panelist, Bob Armitage speaking to us from

1 US PTO Headquarters in Alexandria.

2 MR. ARMITAGE: Good afternoon, or good
3 evening. Am I set to go?

4 MS. PERLMUTTER: Yes, we can hear you.

5 MR. ARMITAGE: Well, thank you for the
6 opportunity to open a discussion on the last
7 session today. I must say, in spite of the
8 skepticism on the need for legislation, I'm
9 actually going to focus on a possible role for
10 Congress to provide some remedial help,
11 particularly I think focused on the bio farming
12 industry.

13 As my opening slide suggests, I intend
14 to use the next seven minutes to address the
15 question can we find a rational, principled,
16 expansive, and politically palatable approach to
17 statutorily defining patent eligibility.

18 To avoid any suspense, my answer to
19 this question is going to be yes we can. Many in
20 the patent profession have analyzed recent
21 Supreme Court Jurisprudence have come to the
22 conclusion that there is no Constitutionally or

1 policy justification for judicially imposing the
2 two part test set out in the Mayo and Alice
3 decisions of the Supreme Court.

4 Instead, a strong case can be made
5 that the explicit statutory requirements for
6 patentability suffice to address all the
7 articulated concerns of the court over patent
8 rights that might cover or otherwise relate to a
9 natural law or phenomenon or other abstract
10 concepts.

11 These two observations taken together
12 suggest that any Congressional action to address
13 the recent Supreme Court Jurisprudence should
14 have as its principle objective the outright
15 abrogation of the so called implicit exception
16 and its two part implementing test.

17 If this premise is accepted, then the
18 only remaining question is what if anything more
19 should a new patent eligibility statute require.

20 In this regard, I think it's important
21 that any abrogation of the implicit exception
22 should not be an invitation by Congress to

1 develop an alternative extra statutory
2 requirement limiting patent eligibility.

3 Congress should exercise its authority
4 to define by statute all the conditions and
5 requirements for patentability including any and
6 all patent eligibility requirements.

7 Over the past two years, I've seen a
8 number of proposed approaches for such remedial
9 limitation, or legislation. Some of these
10 approaches, after careful vetting, unfortunately
11 appear to have produced dead ends.

12 Among what I believe to be the dead
13 end approaches are the so called reappraising
14 efforts. Proposals of this ilk attempt to
15 restate existing patentability requirements in
16 new words. In a new Section 101 provision on
17 patent eligibility designed to moot the Supreme
18 Court's implicit exception jurisprudence.

19 These include proposals that would add
20 a human intervention or a practically useful
21 embodiment or application requirement to Section
22 101.

1 To the extent proponents of these
2 proposals assert that they instead add
3 substantively new patentability requirements
4 rather than merely being duplicative of existing
5 statutory requirements, it remains unclear what
6 objective, predictable, or administrable standard
7 they would impose to hold statutorily patentable
8 subject matter, patent-ineligible under Section
9 101.

10 On November 9th, 10th, and 11th of
11 this year, I had the opportunity to participate
12 in a Banbury Center conference at Cold Spring
13 Harbor. In a statement filed yesterday with the
14 Patent Office as a response to the federal
15 register notice of today's round table, a group
16 of participants from that conference described
17 one option for a new patent eligibility
18 requirement that might accompany the abrogation
19 of the implicit exception.

20 A number of Banbury Conference
21 participants, "recommended that Congress enact a
22 substitute requirement limiting patent

1 eligibility to technological inventions, i.e.
2 inventions contributing to the technological
3 arts. Such a measure would codify the standards
4 set out in the concurring opinion in Kappos V.
5 Bilski and foster greater harmony between US
6 patent law and the patent law in Europe."

7 These Banbury Conference participants
8 are not alone in making such a recommendation.
9 Numerous scholars have suggested that the
10 constitutional reference to the useful arts
11 translated into more contemporary language is a
12 synonym for the technological arts.

13 Indeed, there's a possibility that the
14 European standard for industrial applicability
15 could be adapted into a Constitutionally constant
16 eligibility standard based on defining inventions
17 that contribute to the useful arts.

18 How specifically might a new Section
19 101 be crafted to accomplish all of these
20 objectives? Definitely you would need to
21 assemble together several moving parts to achieve
22 a fully codified eligibility law.

1 First, a new Section 101 could
2 expressly overrule the Supreme Court's two part
3 test in the implicit exception through an
4 unambiguous statutory provision.

5 Second, it could then continue by
6 recodifying in the new provision the existing
7 Section 101 requirement on statutory categories.

8 Third, it could add back a clear right to patent
9 provision that went missing from the patent
10 statute in enacting the AIA.

11 In addition, it could add a new
12 requirement expressly recognizing an implied
13 Constitutional limitation on patenting by
14 recognizing that patent-eligible inventions must
15 contribute to the useful arts.

16 Fourth, a specific provision could be
17 added offering a per se bar on the patenting of a
18 natural law or phenomenon or other abstract
19 concept as such since concepts by themselves
20 don't contribute to the useful arts.

21 Fifth is last provision could be
22 accompanied by a further refinement that adds a

1 new safe harbor to prevent a relationship between
2 a claimed invention and an associated or
3 underlying concept from negating patent
4 eligibility.

5 As a last piece of this new Section
6 101, it could operate to effectively define the
7 useful arts as the technological arts consistent
8 with Justice Stevens' Bilski concurring opinion.
9 Over the years, the patent laws have been saddled
10 with several provisions that seek to diminish or
11 eliminate patents on non-technological subject
12 matter.

13 The proposed amendment to Section 101
14 would moot the need for such limitations and
15 could justify the repeal. In a complete
16 legislative package, the Section 101 amendment
17 could be paired with a research use exemption,
18 implementing the 2006 recommendation of the
19 National Academies.

20 I would note that in the statement I
21 referenced earlier by the Banbury Conference
22 participants, it contains the specific

1 recommendation to this effect.

2 In summary, the preemptive priority
3 for any legislative effort should be the
4 abrogation of the implicit exception and the two
5 part test used to implement it. Doing so may not
6 be politically possible without some additional
7 threshold tests limiting patent eligibility.

8 While the reprising approaches fall
9 short on both legal and political grounds, the
10 useful arts approach, although by no means
11 perfect, appears highly promising. Indeed, it
12 could be leveraged to justify removing the recent
13 patent limiting provisions placed into the patent
14 laws.

15 For the good of the patent system,
16 let's work together, let's find a rational,
17 principle, expansive, and politically palatable
18 approach for taking this effort before the new
19 Congress.

20 I offer these comments, and I hope
21 that they might assist in identifying such a path
22 forward. Thank you.

1 MS. PERLMUTTER: Thank you very much.
2 We'll now turn to our second panelist, David
3 Jones.

4 MR. JONES: That was very good. I'm
5 not going to provide nearly as much content as
6 Bob which is almost always the case. So I'm
7 going to try to keep things fairly short because
8 most of what I had in my notes to talk about
9 people have already addressed in the day and I
10 think we're all probably tired.

11 And so the overall question here is
12 what is the impact of the changes and eligibility
13 line.

14 And Microsoft was very concerned when,
15 you know, when we first saw Mayo and tried to
16 imagine how Mayo would be applied to software
17 brought up the nightmares of the Benson Flook
18 days where it didn't matter how technological
19 your algorithm was, how it was implemented on the
20 computer, the practical impact of that, the
21 benefits technologically of that algorithm.

22 It was just not, you know, under

1 Benson and Flook it was just not patent-eligible.
2 And that was a real problem and concern for us.
3 Unlike some, we were actually encouraged by
4 Alice. Alice seemed to introduce new concepts.

5 This received a lot of discussion
6 today regarding the advancement of technology and
7 set up at least the potential for a dichotomy
8 between practical inventions that advance
9 technology and abstract ideas. Right? If you
10 advance technology you're not an abstract idea
11 and vice versa.

12 That seems to have been taking hold in
13 recent cases like *McRO*, *Enfish*, *BASCOM*, and we're
14 actually quite encouraged by that. So at least
15 at the federal circuit level we actually believe
16 the case law is trending in the right direction.

17 I mean, the initial estimation when we
18 looked at Alice was if this were applied very
19 literally in the software area, we could lose 80
20 percent of our portfolio.

21 And now, you know, I would place that
22 number much, much lower and a lot of the negative

1 effects, at least in the software area, seem to
2 be focusing on inventions that I would not really
3 consider software that are closer to business
4 methods where they don't seem to have a lot of
5 technology or research behind them.

6 So that's point number one. I think
7 the case law is trending in the right direction.
8 We've also become much more comfortable with the
9 examination process. I mean, I've spoken I think
10 individually to several of you but also at PTO
11 events before and expressed some frustration with
12 the 101 rejections that we get.

13 We still get a significant number, but
14 fewer actually than we were post Bilski. So
15 actually the rejection numbers are not as bad as
16 people, or at least as I might have expected, and
17 we're starting to see higher quality rejections.

18 We had early on some fairly hilarious
19 rejections. One involved a server algorithm for,
20 kind of an automated algorithm for optimizing
21 virtual network topology on server farms. And we
22 got a certain methods of organizing human

1 activity rejection, unexplained. Right?

2 So some of these rejections early on,
3 you know, it was clear the examiners were not
4 focusing on the guidelines and they didn't
5 explain. It made communication and responding to
6 these rejections very difficult.

7 That seems to have gotten quite a bit
8 better than it was. In terms of kind of where we
9 go on policy and the overall legislative
10 question, I will say software patents are very
11 important to Microsoft.

12 I mean, we spend over \$11 billion a
13 year on research and development which I think
14 rivals most pharma companies. I mean, our
15 products are terribly expensive to develop. We
16 file a lot of patents. We care a lot about it,
17 and we do feel like the eligibility question has
18 harmed US innovation in some ways.

19 Certainly, the uncertainty about what
20 is patentable has been challenging. We are
21 getting rejections on in some cases from the US
22 PTO where the patent's allowed both in Europe and

1 in China which is slightly hilarious given that
2 software per se is excluded in Europe.

3 So I think that we have had some
4 challenges, we have had some uncertainty. But
5 things are very much headed in the right
6 direction. If that does not continue, we would
7 certainly be open to legislative options.

8 At this point we believe that moving
9 towards an advance in technology notion,
10 something similar to the useful arts option that
11 Bob mentioned actually is already happening in
12 the courts and is very, very useful and avoids
13 the very trouble kind of claim dissection that
14 happened under Benson and Flook and has happened
15 to a certain extent under Mayo and Alice where
16 the courts ignore what they considered to be
17 routine conventional steps and dissect the claim
18 down to an abstract idea and a bunch of stuff
19 that they just don't consider to be all that
20 relevant.

21 But almost any patent can be
22 invalidated under that rationale and, you know,

1 it's really a line drawing problem and a question
2 of how abstract things are. And we would much
3 rather the courts and the PTO focus on
4 technological advancement.

5 We think that's consistent with the
6 policy, of the patent system, and we think it's
7 likely to lead to more predictable outcomes for
8 companies and will drive innovation. So that's
9 all I have and I would be happy to answer any
10 questions.

11 MS. PERLMUTTER: Thank you very much. The
12 next panelist is Professor Peter Menell.

13 MR. MENELL: Nadine, if you can just
14 pull up my slides, thank you. Good afternoon,
15 everyone. This is a great, I think this is a
16 historic opportunity for all of us to share the
17 wide range of ideas. I was especially pleased to
18 learn from the people in the different pockets.

19 As a scholar, I tend to look at things
20 from a I would say higher altitude. I'm trying
21 to look at a big picture historically and also
22 across the industries. And I have to say that

1 I'm inclined to believe that we are at a juncture
2 in US history where it will be necessary, or at
3 least I certainly hope Congress will take up this
4 issue.

5 My three points, and I'll spend most
6 of the time on the first, is that the Mayo/Alice
7 cases are deeply flawed in terms of both
8 statutory legislative history and in terms of
9 jurisprudence.

10 We tend to romanticize the Supreme
11 Court, but we have to recognize, they're a very
12 busy body. They don't have technological
13 expertise as one of their comparative advantages.
14 Their law clerks don't come from the
15 technological fields.

16 And as I'll try to explain, I think
17 that we have some major failings in that part of
18 our patent system right now. I'll briefly talk
19 about the impact of 101 on innovation, and then I
20 want to close by calling for legislation along
21 the lines that Bob Armitage did, and for a bigger
22 role for PTO in that process.

1 So let's look at the Mayo case. Why
2 did we get here? I mean, it struck me and many
3 scholars who had been following the Supreme Court
4 that this was a situation following Bilski in
5 which we wouldn't get much of a big bang.

6 Many of us didn't file briefs. We did
7 file in Bilski. Bilski seemed to say Supreme
8 Court's going to take a cautious approach. But
9 what did we get in Mayo? We got I think the most
10 radical departure from traditional principles of
11 any case in history.

12 And why? Well, as we've heard today,
13 it was driven largely by concerns about patent
14 trolls. There was concerns about nuisance suits
15 and I think the Supreme Court thought maybe the
16 101 lever could be used.

17 So one of the things that I've done
18 more recently is to pull all of the briefs in the
19 Mayo case. There were several dozen filed, and
20 there was exactly one brief that talked about
21 what the Supreme Court ultimately ruled.

22 There was only one brief that refers

1 to the Nielssen case, that refers to this earlier
2 era. And it was filed by Josh Sarnoff, a
3 professor who I know and I admire, but I have to
4 say I think Josh missed the boat on this. And
5 we've since spoken and he has acknowledged that
6 he didn't see all of the issues.

7 So here in Section 1(a) of his brief
8 he says prior art treatment of excluded
9 discoveries and creativity in their application
10 are longstanding requirements of the Patent Act.

11 Well, the basis for it which is
12 summarized here, and this will be available for
13 those of you who are going to look online, are
14 some statements from the O'Reilly Morse case that
15 references the Nielssen case.

16 So O'Reilly and Morse was about
17 telegraphy. Most of the claims were granted, but
18 the final kicker was I don't propose to limit
19 myself. I'm going to claim every use of
20 electromagnetism.

21 And the Supreme Court promptly
22 rejected that. And in so doing, they talked

1 about this case involving the hot blast furnace.
2 This was one of the most important inventions of
3 the industrial revolution and it involved a very
4 simple principle.

5 If we pre-heat the air that we inject
6 into a furnace, we can make the furnace hotter.
7 Now that seems pretty obvious, but it wasn't
8 obvious then and it was a very important
9 innovation.

10 The Supreme Court talked about it.
11 But as it has been reexplained in the Flook and
12 later Mayo decisions, they got it completely
13 wrong in the modern cases and it was completely
14 in the O'Reilly Morse case.

15 They said that Morse did not provide
16 a machine or apparatus, and therefore he was not
17 eligible whereas Neilssen had. And the fact that
18 he claimed it very broadly was fine because all
19 methods of preheating air worked, and the
20 apparatus was well known.

21 And when you go back to the case,
22 you'll see there's an extensive quotation from

1 Baron Parke in the Neilssen case. And I've
2 highlighted it in yellow. I'm not going to read
3 it in detail. The highlighted language is what
4 we're going to come back to.

5 There is a statement, and I'll say
6 that this statement taken out of context supports
7 the Mayo decision. But when we learn the
8 context, it doesn't. So we think the case must
9 be considered as if the principle being well
10 known, the principle of preheating.

11 Okay, so let's come forward with this
12 concept. What's wrong with this case from the
13 standpoint of jurisprudence and legislative
14 history? Well, had I filed a brief I would have
15 asked the question what is the purpose of the
16 term discover in our statutory history?

17 And if you go all the way back to the
18 beginning, it's been referenced earlier today.
19 Discoveries is a touchstone for our patent
20 system. It's always been there, there's
21 references throughout all of this case law. And
22 yet the Supreme Court doesn't give any credit or

1 doesn't ask why it's in the legislative history.

2 The most important source of
3 information in my review is the 1836 Act. We
4 don't talk a lot about it but it's the most
5 important act for the purposes of the Patent
6 Office. It created you.

7 And what did the Act do? Well, it
8 solved the problem that we had from 1793 update
9 36 which is we only had a registration system.
10 And I had studied this legislative history many
11 times before in trying to understand the history
12 of claiming.

13 But I went back and I looked at the
14 main report, the senate report. And it talks
15 about the problem of a registration system and
16 how this leads to nuisance claims in a lot of the
17 problems we hear about today.

18 But there's another portion of the Act
19 that talks specifically about the notion that the
20 patent system extends to science and discoveries
21 of science. And it couldn't be stated more
22 clearly that the purpose of the patent system is

1 to reveal the mysteries of nature.

2 This is such beautiful language when
3 you realize that that's what is happening in the
4 laboratories. And as long as you apply it,
5 that's all that you need.

6 And the Supreme Court was unaware of
7 this language. And I mean, say it's old. Well
8 one can come forward and see that this discovery
9 concept finds its way throughout our history.

10 But the Planned Patent Act and it's
11 legislative history talked a lot about this
12 notion of discovery. And we allowed discoveries,
13 we allowed protection for planned patents. These
14 are not things that are made by humans.

15 They are discovered and protected for
16 nearly a century now. And so this is, I think, a
17 critical and underexplored office that the Patent
18 Office can really help in bring into the
19 attention.

20 Now let's go to the Mayo case. The
21 Mayo case goes back to the same language. Here
22 it is, you can see that they have the same

1 quotation. Justice Breyer pulls it out, he says
2 that this is important to him and this is how
3 he's going to base the inventive application
4 requirement.

5 I'm almost done. I'll go as quick as
6 I can. And so he says in the opinion itself, he
7 says that there was an inventive application.
8 And well, that statement as compared to the
9 actual record in Neilssen. Here's what they said
10 in Neilssen, this is the case that he says there
11 was inventive application.

12 He says the mode of heating was
13 perfectly well known. It was perfectly well
14 known. They didn't read the case. Now this is
15 our Supreme Court, they're busy. But they ought
16 to raise the cases they cite. That's what
17 Neilssen says.

18 What was Neilssen really about? It
19 was about whether it was a machine. And the
20 important line in this passage is the sentence
21 prior to we think the case must be considered as
22 if the principle being well known. It says we

1 think that the plaintiff does not merely claim a
2 principle but a machine.

3 And the reason they use this reference
4 to considering the principles well-known is
5 because they were drawing reference to an earlier
6 case, Minter v. Wells where there was a machine
7 versus principle issue.

8 And in that case, the principle was
9 well known. So they were merely postulating.
10 This is, like, a 1L, you know, failure to read
11 the case kind of problem. So that's what we're
12 dealing with.

13 So what I had hoped, and many did,
14 that the Supreme Court could fix that in the
15 Ariosa case. There we got I think a really clear
16 case of a scientific principle being applied, an
17 important discovery that's important for all of
18 us. And yet, it was considered unpatentable.

19 So many of us who filed briefs, I
20 filed a briefs. I filed a brief with Jeff Lefson
21 and we said just go back and fix it. Well, the
22 Supreme Court didn't fix it. So now we live in

1 the world in which we all have to pretend that
2 the emperor has clothes.

3 Well, let me just tell you, it
4 doesn't. And the PTO, without being provocative,
5 can just say here's the history, you ought to
6 know it. It's an authoritative agency. And in
7 that respect, what I want to just say is that the
8 Supreme Court has a history in this area and they
9 used to be a little more shy about technological
10 superiority.

11 In the Benson case, they completed the
12 decision. And this is Justice Douglass who gave
13 us a lot of questionable patent jurisprudence.
14 But even he says if these computer programs are
15 to be patentable, we need to have Congress look
16 at this issue.

17 So I don't think that we should act
18 like the common law can solve all ills here. We
19 have a pretty clear ill. It ought to be
20 addressed. Now I would like to open up that box
21 wider and have the Supreme Court, I mean have
22 Congress look at a variety of the questions that

1 have been raised.

2 But certainly, we shouldn't let this
3 issue stand as it's currently presented. Now
4 what's the role for the PTO here? Well, I think
5 the PTO can do things that it's doing in some
6 other areas like in the copyright area, produce a
7 report that tells the full history and explains
8 this kind of background information so that our
9 legislators know they're not seeing it from
10 lobbyists, they're seeing it from an
11 authoritative agency.

12 I'll mention the Copyright Office did
13 a similar thing recently on pre-72 sound
14 recordings and the making available right. These
15 reports I think can help fuel very positive
16 legislative action.

17 I'm not worried about unintended
18 consequences because as has already been said,
19 we're living through very significant unintended,
20 and as I've tried to illustrate, just completely
21 mistaken decisions.

22 MS. PERLMUTTER: Thank you very much.

1 Let's turn to our third panelist, Wayne

2 MR. SOBON: Thank you very much. Good
3 afternoon, I'm Wayne Sobon. I've been a patent
4 agent and an attorney for the last 30-some years.
5 I'm a past President of AIPLA and I recently
6 served on the Patent Public Advisory Committee of
7 the US PTO.

8 But I'm here delivering these remarks
9 on behalf of myself alone. Similar to Mr. Ruben
10 and Professor Menell, I would like to go back
11 also to some first principles in history.

12 Article and Section 8 of the
13 Constitution neatly divided the promotion of on
14 the one hand science, the fields of knowledge and
15 ideas by securing exclusive rights to authors of
16 their writings, things like books and maps and
17 charts.

18 And then the useful arts where science
19 and ideas are transformed into tools and actions
20 in the world by securing exclusive rights to
21 inventors of their discoveries.

22 Basic ideas in science remain free for

1 all. One of the first Congressional acts was, as
2 we know, the Patent Act of 1790 which granted
3 patents to any persons that, "have invented or
4 discovered any useful art, manufacture, engine,
5 machine, or device or any improvement therein not
6 before known or used provided that it was deemed
7 sufficiently useful and important."

8 I think it's instructive to go back
9 and understand what was meant by useful arts.
10 According to Sheridan's Dictionary of 1780,
11 useful meant, "convenient, profitable to any end,
12 conducive or helpful to any purpose," and art
13 meant. "the power of doing something not taught
14 by nature and instinct, a trade, artfulness,
15 skill, dexterity, cunning."

16 It's also interesting for us modern
17 eras to know that the original sense of
18 technology was from the Greek technae which
19 simply meant art or craft as opposed to episteme,
20 or scientific knowledge or systems of
21 understanding.

22 Technology was much broader than its

1 current engineering focus meaning. Sheridan
2 defined technical as, "belonging to the arts, not
3 in common or public use, popular use." And
4 Webster in 1833 defined technology as simply a
5 treatise on the arts, an explanation of terms of
6 art.

7 The intellectual property system
8 framed in the Constitution and enacted in the
9 first of our patent laws, and to my mind was
10 elegant and sensical. Science was free to all
11 people to advance. The work advancing science
12 was protected through copyrighted works, and
13 applied knowledge was protected by patents.

14 And the breadth of useful arts was
15 extremely wide, encompassing all that was useful
16 in the real world and in commerce, "the power of
17 doing something not taught by nature and
18 instinct."

19 This elegant scaffolding I would say
20 sufficed the US Patent system for the better part
21 of 200 years. And similar to Professor Menell,
22 in certain cases touched on the boundaries

1 between abstract idea, episteme, and protectable
2 useful art, technae.

3 The Morse Telegraph case I think is
4 really instructive. There the Supreme Court
5 denied Morse's super broad Claim 8, "the use of
6 mode of power of electric or galvanic current
7 which I call electromagnetism, however developed
8 for marketing or printing intelligible
9 characters, signs or letters at any distances."

10 The Court rejected this saying, "He
11 claims an exclusive right to use a manner and
12 process which he has not described and indeed had
13 not invented, and therefore could not describe
14 when he obtained his patent. The Court is of the
15 opinion the claim is too broad and not warranted
16 by law."

17 While often cited as an early subject
18 matter case, really the Court was making what we
19 would now term a 112 indefiniteness and lack of
20 written description rejection.

21 It's also I think incredibly
22 instructive to note that the same Court allowed

1 Morse's Claim 5 which broadly claimed, "The
2 system of signs consisting of dots and spaces and
3 horizontal lines for numerals, letters, words, or
4 sentences substantially as set forth herein and
5 illustrated for telegraphic purposes."

6 A system of signs, but specifically
7 applied in the real world within telegraphy.
8 Query whether this would survive Alice.

9 Section 101 patentability challenges
10 of the '70s in Benson and Flook culminated in the
11 Diamond vs. Diehr decision of 1981 and the
12 roughly contemporaneous Chakrabarty decision of
13 1980 which set out a broad ambit of patentability
14 on the advent of the digital and biotechnology
15 revolutions.

16 Coming as they did at the foundation
17 of the Federal Circuit, these decisions
18 reinforced a view that the US Patent system was
19 capable of broadly encompassing, "anything under
20 the sun that is made by man," as the Chakrabarty
21 court quoted the Senate Committee report on the
22 1952 Act.

1 The Diehr Court noted that Section 101
2 simply provides, "a general statement of the type
3 of subject matter that is eligible for patent
4 protection subject to the conditions and
5 requirements of this title."

6 The more substantive requirements for
7 whether a particular invention is novel, Section
8 102 and non-obvious, Section 103 stand wholly
9 apart from whether the invention falls into a
10 category of statutory subject matter.

11 Quoting the '79 CCPA case *In re Bergy*
12 authored by Judge Rich who we all know was a co-
13 author of the Patent Act of 1952. And as Judge
14 Rich underscored in *Bergy*, Section 101 was never
15 intended to be a standard of patentability.

16 The standards or conditions as the
17 statute calls them are in 102 and 103. This is
18 consistent with the legislative history
19 accompanying the 1952 Act which explains that
20 Section 101 sets forth the subject matter that
21 can be patented subject to the conditions and
22 requirements of this title, that is 102, 103, and

1 112.

2 Of course, as a number of people have
3 noted, every innovation is a set of abstract
4 ideas given concrete application in the real
5 world. Unfortunately under current practice,
6 Section 101 has become a destructive rusted
7 machete for an area of law that calls for sharp
8 scalpels.

9 There seems to be something especially
10 difficult for the courts and the PTO in handling
11 digital and biological innovations. It's far
12 easier today I would say to get a patent by
13 adding one more gear or lever to an 18th Century
14 cuckoo clock than trying to protect an
15 elaborately coded new application on a
16 smartphone.

17 And the US is now falling behind
18 Europe and China in the protectability of these
19 inventions. I would say we have allowed the
20 Supreme Court to craft our US industrial policy.
21 And as noted by at least some today, there is
22 some evidence that failure to protect these

1 inventions is having an effect on early stage
2 funding and development.

3 Absent a strong turn by the federal
4 courts back to the Diehr and Chakrabarty vision
5 of patentability, I would argue we probably do
6 need a legislative adjustment, one that should be
7 as elegant and brief as possible in line with the
8 adjustment that happened in the 1952 Act that
9 added the new brief Section 103 to, "stabilize
10 judicial jurisprudence about obviousness."

11 I would suggest something similar for
12 Section 101, something along the lines of adding
13 at the end a simple sentence saying, for purposes
14 of this Section, it is irrelevant whether the
15 invention or any of its claimed elements is
16 otherwise unpatentable under Sections 102, 103,
17 or 112.

18 I believe something this simple or its
19 equivalent accompanied by clear legislative
20 history can help undo so much of the new
21 troubling jurisprudence that imports these other
22 conditions of patentability at the outset and

1 restore 101 to the minimal, simple threshold for
2 inventions of the useful arts to which it was
3 always intended. Thank you.

4 MS. PERLMUTTER: Thank you very much.
5 So our last panelist on this panel is Marion
6 Underweiser.

7 MS. UNDERWEISER: Thank you very much.
8 Thank you for the opportunity to speak today.
9 Subject matter eligibility law in the United
10 States is broken. The Supreme Court's recent
11 decisions in *Bilski*, *Mayo*, *Myriad*, and *Alice* are
12 the cause.

13 The Court has unapologetically refused
14 to define the metes and bounds of its test, and
15 has against the advice of the patent community,
16 including the PTO, used 101 to do the work
17 properly reserved for the other statutory
18 sections causing great uncertainty for both
19 patentees and potential infringers about the
20 enforceability of a broad swath of both software
21 and biotechnology patents.

22 This is not some minor issue that can

1 be worked out on a case by case, fact by fact
2 basis over the course of years. It's a critical
3 problem that undermines innovation and economic
4 success in the United States, and it is therefore
5 one that must be fixed in a holistic way that
6 reflects a healthy innovation policy which is
7 something only Congress can do through
8 legislation.

9 We at IBM agree that patent quality is
10 important, and IBM has for many years worked with
11 the Patent Office and with Congress and with
12 other patent owners to improve patent quality.

13 But let me make this point very clear.
14 Subject matter eligibility is not a way to
15 determine, address, or improve patent quality.
16 Subject matter eligibility does not address the
17 matters that critics of the patent system
18 complain about such as patents that are vague,
19 old, or overbroad.

20 This is the work of the other
21 statutory requirements found in Sections 102,
22 103, and 112. Nor is subject matter eligibility

1 about whether a patent owner irresponsibly
2 asserts its patent rights.

3 The inevitable reality that some
4 patents are, sorry, that subject matter
5 eligibility is about the areas of innovation that
6 a Government chooses to encourage or to
7 discourage.

8 The inevitable reality that some
9 patents are of poor quality or asserted by
10 irresponsible parties is not a reason to make it
11 impossible for anyone to obtain patents because
12 they happen to be in a certain technological area
13 as many people have mentioned today use the same
14 metaphor.

15 This overreaction is a classic example
16 of throwing out the baby with the bathwater. A
17 vague and narrow scope of what is patent-eligible
18 does not help us explore the specifics of any
19 particular invention, nor does it address abusive
20 litigation behavior.

21 Instead, it establishes a cramped
22 innovation policy that picks winners and losers,

1 awarding enforceable patent rights to those who
2 are lucky enough to work in a field arbitrarily
3 deemed to fall on the right side of the line.

4 And where is this line being drawn?
5 Currently the law creates uncertainty and narrow
6 patent eligibility in the most cutting edge areas
7 of innovation including software and
8 biotechnology, fields that are the least
9 understood and most vulnerable to
10 misappropriation.

11 Undermining the incentives for
12 investment and innovation in these fields
13 discourages research and development and reduces
14 the availability of innovative products.

15 In IBM's field of information
16 technology for example, software exports generate
17 between \$50 and \$57 billion in 2012. Moreover,
18 exports of software and related services grew by
19 nine to ten percent per year between 2006 and
20 2012, nearly 50 percent faster than all US
21 exports.

22 And the software and information

1 technology industries have been a bright spot in
2 an economy that often struggles to create jobs,
3 directly employing more than 2.5 million
4 Americans in 2014 and indirectly supporting
5 nearly 7.5 million more jobs.

6 Software has also become the medium of
7 modern innovation, revolutionizing industries
8 such as automotive, healthcare, and manufacturing
9 to name a few.

10 It's hard to conceive of a more
11 damaging policy direction for our country than
12 one that undermines R&D investment in this area.
13 But that's exactly the result of the current
14 narrow, uncertain state of subject matter
15 eligibility law.

16 IBM is a software company. The
17 cutting edge in software development is cognitive
18 computing or artificial intelligence. This year
19 the World Economic Forum named AI as one of its
20 top ten emerging technologies for 2016 because it
21 could unlock higher productivity and better
22 health and happiness for millions of people

1 within the next few years.

2 Leading software companies are making
3 significant investments in AI. At IBM for
4 example, cognitive computing is driving whole new
5 categories of industry specific innovation in
6 areas such as finance, healthcare, and security.

7 But innovators can only afford to make
8 these types of paradigm changing leaps in
9 innovation if they are certain that patents will
10 perform their job of protecting their significant
11 investments in R&D.

12 Irving Wladawsky-Berger, a thought
13 leader and former strategist for IBM, recently
14 said that one of the key ways of assessing
15 progress in AI is to compare it to human
16 intelligence.

17 Any activity that computers are now
18 able to perform that was once the exclusive
19 domain of humans could be counted as an AI
20 advance. But the current state of eligibility
21 law makes vulnerable this new horizon, distorting
22 and oversimplifying inventions, leading to a

1 determination that many are patent-ineligible.

2 Without any fact finding or claim
3 construction, a judge can simply declare that an
4 invention implemented through software is
5 something humans have previously done, now
6 enabled on a generic computer, and thus patent-
7 ineligible abstract idea.

8 We have heard some, many people today
9 point to recent cases where software is actually
10 found patent-eligible, to argue that the courts
11 are approaching a solution on patent eligibility.

12 While we are certainly gratified that
13 not all federal circuit judges read the Alice
14 decision as the death knell for software patents,
15 the fact that over two years after the Alice
16 decision, with over 12,000 claims invalidated,
17 some judges faced with clearly meritorious
18 inventions will work backwards to justify
19 eligibility does not mean we should call off this
20 type of conference and head home.

21 These cases use an ends justify the
22 means analysis and they are thus inconsistent

1 with each other and provide no reliable rules
2 that can be used to predict outcomes going
3 forward.

4 This is the hallmark of failed
5 jurisprudence. Judges have no faith that
6 applying the test will yield what they believe
7 should be the proper outcome, so they bend the
8 test to suit their desired result. Step two
9 becomes step one, preemption matters, and then it
10 doesn't.

11 This is judicial anarchy aimed
12 directly at groundbreaking technology. We need
13 clear rules governing patent eligibility both for
14 the benefit of innovative firms and for society,
15 the ultimate beneficiary of these innovations.

16 We cannot afford to perpetuate the
17 failure of our subject matter eligibility laws.
18 Even now while China's Patent Office considers
19 ways to make it easier to obtain software related
20 patents, we continue to flounder and meander in
21 confusion, not on whether to sanction bad actors
22 or how to find and apply the best prior art, but

1 on the simple question of what we think our
2 patent systems should protect.

3 A significant course correction in
4 subject matter eligibility law is required to
5 protect, sustain, and grow US R&D investments.
6 Time and again, the courts have shown that they
7 do not know how to address this issue.

8 The time has come to ask Congress to
9 sweep away the cases that have created this
10 problem by finding a legislative solution that
11 ensures we promote innovation in the fields so
12 important to our economy. Thank you.

13 MS. PERLMUTTER: So I would like to
14 thank all of the panelists for their
15 presentations. And let me kick off the Q&A part
16 of the discussion by noting that on this panel,
17 unlike some of the others, the majority, although
18 not necessarily everyone, seems to support a
19 legislative solution.

20 We heard from Bob Armitage as the
21 first speaker a fairly detailed outline of a
22 legislative approach which would overrule the two

1 part judicial test in favor of a useful arts or
2 technological advancement approach.

3 And so I would like to throw the floor
4 open to the four other panelists for any views or
5 thoughts or reactions to that proposal,
6 recognizing that you may have heard it for the
7 first time a few minutes ago.

8 MR. JONES: So we've long thought that
9 the purpose of the patent system was to advance
10 technology and that a useful arts test made
11 sense. I mean, I think the, as I said, there is,
12 who knows if it will be sustained but there
13 really does seem to be a trend if you look at the
14 Federal Circuit decisions over the last year in
15 the software area.

16 Both the ones that hold patents
17 eligible and the ones that hold patents
18 ineligible already seem to be focusing on the
19 advance in technology language from Alice.

20 So you know, I think you would have to
21 very carefully weigh, and I apologize, I worked
22 in Congress for a long time so maybe I'm overly

1 skeptical. I just, a lot of different things can
2 go wrong in the Congressional debates and then
3 you're stuck with, you know, assuming that
4 something's actually enacted you're stuck with
5 the language.

6 So I think you would have to weigh the
7 risks there to really believe something was going
8 to make things better. But in principle, I think
9 a technological arts, useful arts type of test,
10 or a technological effects type of test as is
11 applied by the EPO actually will lead to good
12 policy outcomes.

13 MR. MENELL: I think we probably all
14 have something to say, so we'll just go down the
15 line. So I think it, I think we heard a lot of
16 support for that type of test, although some
17 earlier panels thought that it can be done
18 through the courts.

19 I question that, especially in, well
20 the diagnostic area is a completely, you know,
21 different kettle of fish and it wouldn't address
22 some of the concerns that exist there.

1 I do think that the courts have gotten
2 close to a part of the useful arts test in the
3 Alice decision, and certainly the concurrence in
4 Alice which seems to endorse Justice Stevens'
5 opinion from Bilski.

6 And I frankly think that the business
7 method path has been a very bad path for the
8 patent system. And I think even Judge Rich was
9 pushing the line based on some of his earlier
10 writings. We can talk about that separately.

11 I would like to see the diagnostic
12 issue addressed with some of the data and some of
13 the analysis. I can't say that Professor Chien's
14 preliminary results helped me that much because
15 we may have been seeing a real expansion in that
16 area.

17 So even if there's modest growth, we
18 still might be losing. And the other thing we're
19 doing is pushing a lot of it into trade secrets.
20 We're doing a lot of things that I think are very
21 risky if we want to have disclosure and
22 advancement of knowledge through patent type

1 systems.

2 On software, I think machines have
3 long provided a basis for protecting software.
4 What I question is 20 years, and that is sort of
5 a verboten issue. But there is nothing
6 scientific or economic about 20 years for
7 everything. And that might have worked back in
8 the age of apprenticeship, but it doesn't work
9 today.

10 And so what I would push for for a
11 much longer term revision. Not something we
12 would have to do next year, but I would hope that
13 the Patent Office could see that we want to move
14 towards more of a technological zoning system
15 where we identify within pockets of technology
16 ways of figuring out how best to promote instead
17 of just saying we have a one size fits all
18 system.

19 Now I still think we can do something
20 sooner to help the diagnostic industries and to
21 clear up some of the confusion that's out there.
22 But for me, long term, I would like to see a much

1 greater emphasis.

2 There's now an Office of the Chief
3 Economist. We ought to be thinking about how to
4 go beyond what has been a centuries old system to
5 a truly sophisticated and forward looking system.

6 The other thing is, you know, people
7 say you have to do one size fits all because, you
8 know, software can be used in anything. There's
9 nothing to suggest that we can't be creative in
10 that enterprise.

11 The other thing is we can do things
12 prospectively. So we don't have to kill the
13 existing patents. We don't have to hurt the
14 existing stakeholders. But we can help the next
15 generation of stakeholders, some of the people
16 perhaps that Julie Samuels was talking about, try
17 to bring them in without hurting the people like
18 IBM who have already made those investments based
19 on the system that was there.

20 MR. SOBON: I would say a couple
21 things. One is I am speaking also from my past
22 experience as I was Chief IP Counsel for

1 Accenture and we were very heavily involved in
2 the Bilski debate because that company especially
3 spent hundreds of millions, still continues to
4 spend hundreds of millions of dollars on research
5 in the field of industrial engineering which is
6 not necessarily, might not fall within the
7 technological arts in a narrow sense.

8 But as I tried to argue I think in my
9 comments, historically understood, useful arts
10 was a much broader thing than what we might think
11 of today as technology which I think gets seen as
12 transistors and gears and chemicals.

13 And we were actually very pleased that
14 the Bilski court ruled that, once again, what
15 they had already ruled several times in the
16 Benson Flook and Diehr decisions which was they
17 had never said that there was a specific machine
18 or transformation test or a bright line test for
19 this.

20 And they also had never said and never
21 would say that a business method, absent any
22 actually specific mechanism wouldn't be

1 necessarily potentially patentable. I think that
2 was a good decision.

3 I think the key ill of the current 101
4 jurisprudence, which I think Professor Minell,
5 given what his comments would possibly agree with
6 me and what I tried to express is that the ill is
7 the importation in the two part test of a novelty
8 and/or obviousness test imported into the initial
9 101 analysis without factual discussion on it.

10 And it sounds great if you're on the
11 defense side to have at the pleading stage a
12 patent completely destroyed without any
13 discussion about whether it really truly was a
14 novel or an unobvious improvement on the
15 background useful arts.

16 That I think is the key ill. And
17 that's what I think a very surgical legislative
18 fix should try to fix if the courts seem not to
19 be able to do so. And I think given the Supreme
20 Court's decisions after Prometheus, I find that
21 is going to be very hard to undo that gene, which
22 I think is the pernicious issue that we're facing

1 right now.

2 MS. UNDERWEISER: So I have to
3 apologize. I have not studied carefully Bob's
4 proposal, so I'm not going to specifically speak
5 to that language. But I just wanted to say a
6 couple of cautionary words about a kind of a
7 technical arts or technical effect test.

8 We do not have a definition for that.
9 The EU doesn't either. And I know that looking
10 at the case law in the EU, we see this and say
11 oh, it's stable. There are inventions that are
12 patentable in the EU and they're not patentable
13 here.

14 But the truth is the EU has gone
15 through quite some time to get to where they are,
16 and it is my understanding that the way they
17 define their concept of technical is by how close
18 or far away a patent claim is from their stated
19 exclusions.

20 And the ones that I think you may have
21 seen in the statute to business methods or
22 software per se or games or other gaming methods

1 or other things of that nature which the EU has
2 made a policy decision to exclude.

3 Right, so we can have a debate in
4 Congress about whether or not we think certain
5 subject matter areas should be excluded, but it's
6 something we've never done in the US, and it's
7 never served us to promote innovation.

8 So I think we have to be careful about
9 how we define something like this. You know,
10 again, it sounds good, technical, non-technical,
11 right? But we know from looking at, someone
12 earlier today referenced the cover business
13 method review statute and the concept of
14 technical being introduced into the definition.

15 And with all due respect, the
16 definition is a little circular. And so, you
17 know, there isn't really a separate definition in
18 there of what is meant by that. So it's
19 something that we all kind of struggle with to
20 figure out where is this going to be, not
21 necessarily going to be, you know, a panacea for
22 us.

1 And we do have to ask ourselves much
2 as things are in chaos in the US right now, is
3 the EU system our goal. Is that what we want?
4 Has the EU system promoted innovation in a way
5 that we think is what we deserve in the United
6 States to promote innovation.

7 MR. KRAUSE: Well, just following up
8 on something Marian just mentioned, and also I
9 kind of almost heard a reference to it when Wayne
10 was talking. Marian mentioned the fact that
11 Europe doesn't allow patents on games, for
12 instance.

13 Wayne on the other hand endorsed the
14 definition of useful arts based on the dictionary
15 definitions from the 1700s which I think would
16 apply to games, am I correct on that?

17 MR. SOBON: You allowed the Monopoly
18 patent in the '30s. I think gaming and systems
19 of games is perfectly patentable. Those are
20 useful and they're creative and I see no reason
21 why you can't patent those. And when you in
22 fact, the Patent Office has routinely allowed

1 those sorts of things.

2 MR. KRAUSE: Okay, so that's --

3 PARTICIPANT: Do the other panel
4 members --

5 MR. SOBON: It's sort of like why not.
6 I mean, I don't understand what the real harm is,
7 frankly. So if you want to have a different
8 game, get a different game.

9 MR. KRAUSE: Well, the question is how
10 much resources should patent examiners who are
11 trained in what we refer to as technology have to
12 devote to examining things that are clearly non-
13 technological which other countries, as Marion
14 says, have excluded completely.

15 MR. MENELL: Well, you know, earlier
16 we heard reference, I think it was the Amazon
17 representative, to sort of the overarching
18 principle. You know, we shouldn't just assume
19 because it's useful art that Congress should
20 exercise the power that the Constitution gives
21 it.

22 We should be continually evaluating

1 how to move forward to promote progress, and that
2 changes over time. One of the really complex
3 aspects of these puzzles that we're currently
4 working with is that there are other methods of
5 intellectual property, trade secrets, copyrights,
6 trademarks, that all come into play as companies
7 are developing their portfolios and building
8 these businesses.

9 And we shouldn't assume that just
10 because it's not patented there isn't some
11 motivation. Network effects, first mover
12 advantage, there are a lot of ways in which
13 companies can and do strategize about these
14 issues.

15 So just because these are large
16 industries doesn't mean that sort of pumping up
17 the patents because we've also heard that there
18 can be negative effects when we give out a lot of
19 these rights, and then we wind up playing these
20 nuisance suit games.

21 And so I do think that there are
22 multiple ways of approaching this. But I do

1 agree that we ought to try to at least push us
2 back on the path of protecting fundamental
3 applications of scientific discoveries because
4 that is I think part and parcel of what does, you
5 know, deal with public health issues and
6 important issues.

7 Games, I don't know. I would like to
8 see a study. But I certainly feel that, you
9 know, the Sequenom type patent was eligible. It
10 may well not have been patentable. But it was
11 the idea that we wouldn't allow a non-invasive
12 diagnosis to be even within that pool is just
13 seems, you know, completely outside of what I
14 think the patent system should be about.

15 MS. PERLMUTTER: I also want to make
16 sure that Bob Armitage has a chance to respond if
17 he would like to.

18 MR. ARMITAGE: Yes, maybe just a
19 couple of comments. You know, I know in my heart
20 perhaps what the perfect amendment would be to
21 the patent statute to solve the problem with the
22 Supreme Court jurisprudence.

1 And I would have stopped my slides
2 with the one that talked about abrogating the
3 entire body of jurisprudence and just relying on
4 the statutory provisions on the ground that they
5 do all the policy work the Supreme Court thinks
6 needs to be done.

7 But having listened to the entire
8 program today, I'm fairly convinced that as
9 perfect as that amendment is, it politically
10 doesn't stand a chance of going anywhere.

11 So then the question becomes if we're
12 going to do something that from at least that
13 extreme point of view is not a perfect solution,
14 what do we do that's still principled and
15 palatable and yet has an expansive view on the
16 role of the patent system.

17 And therein lies, at least my belief,
18 that unless we start thinking about making
19 explicit what is implicit, that is if something
20 doesn't contribute to the useful arts I doubt
21 there is one Justice on the Supreme Court who
22 believes that that type of subject matter defines

1 something that's eligible for patenting.

2 So if we just start from that
3 principle, my question is can we make it work
4 because I have a hunch that if we could, that
5 might be an imperfect solution. Imperfect, yes,
6 but yes, a solution because it just might be
7 something you could get through Congress.

8 MR. KRAUSE: But what's your
9 definition of useful arts, Bob? It sounds like
10 it's different than Wayne's.

11 MR. ARMITAGE: Yes, you know, it's
12 very interesting because I started working on
13 this out of a sense of desperation that
14 everything else I saw being done just didn't look
15 to me like it made sense for one reason or
16 another.

17 I came across and read again very
18 carefully Justice Stevens' concurring opinion
19 which has kind of a middle ground, not Wayne's
20 ground but a middle ground on what useful arts
21 means.

22 I took another look at actually Tony

1 Dutra's brief, his own personal brief in the
2 Alice, amicus brief in the Alice decision that
3 again went through the history of how useful arts
4 might distinguish from other types of human
5 endeavor that wasn't considered eligible for
6 patenting.

7 If you fast forward and take the
8 contemporary view of the term technological and
9 technology, you have basically what was done with
10 the trips agreement saying as Hans Sauer did this
11 morning, patents are for fields of technology.

12 So I think basically you build on that
13 contemporary understanding. You have it informed
14 by what's going on in Europe. You don't
15 necessarily do exactly what the Europeans do, but
16 you adapt it to our Constitutional tradition of
17 limiting patents to contributions to the useful
18 arts for the purpose of promoting progress in
19 those arts.

20 MR. KRAUSE: Just one more quick one.
21 Wayne, you mentioned that there's evidence that
22 there's a deficit in early stage funding for

1 small businesses. Julie Samuels kind of said the
2 opposite in her remarks. Can you submit evidence
3 to us or can you talk about it a little bit here?

4 MR. SOBON: I have seen people refer
5 to this, I'm not an expert in that area. You
6 know, and I think the Chamber of Commerce's
7 comments today were along the lines of just
8 almost the opposite.

9 There is an effect and I think there
10 is at least anecdotal evidence that, you know,
11 and some of us have focused on that venture
12 capitalists and others investing in new stage
13 funding on average, on the margin would rather
14 invest in something that's protected if there
15 are, especially if there's existing market
16 entrants who already could then see what the new
17 company is doing and rapidly take it on and use
18 their network effects to just adopt the new
19 technology.

20 That's obviously a very big danger, so
21 having something protectable like Microsoft found
22 with Stack Electronics is actually very powerful

1 for small and medium size enterprises.

2 MR. KRAUSE: Yes, what did you think
3 of that case, Microsoft, Stack Electronics from
4 the 1990s?

5 MR. SOBON: I'm sorry, but it predates
6 me.

7 MR. KRAUSE: It's famously what caused
8 Bill Gates to change his mind about patenting
9 because it was a small company that actually --

10 MR. JONES: And there a big damages
11 award. So I generally agree that it actually is
12 a large company. In some pays patents, although
13 we tend to be fairly pro-patent, I mean, we have
14 tens of thousands of engineers that can replicate
15 most technology once we understand how it works.

16 So it's very easy for large companies
17 to go out there and swamp the small guys. And
18 you know, our general counsel used to say, I
19 don't know if he still says it but he used to say
20 there are only two reasons for us to acquire a
21 company, to get their people or to get their IP.

22 Right, those are the two things that

1 we can't, you know, build internally. We either
2 need to get their employees because they're
3 brilliant or we need to get their IP.

4 So I do think that IP, in the
5 acquisition context, actually matters a fair
6 amount to lots of companies.

7 MR. MENELL: Well, if you think about
8 what's been going on over the last decade, I
9 mean, Congress took up these issues in the early
10 2000 period after the bubble burst. And most of
11 the action was actually in the courts.

12 We get eBay, we get KSR, we got a
13 whole series of cases. What we ultimately get
14 from Congress is the AIA which sort of added a
15 new administrative process and first to file.

16 But we now are facing sort of a second
17 tier of problems caused by one part of that
18 Supreme Court jurisprudence. You know, I don't
19 have a problem with eBay, KSR. I mean, one could
20 quibble about whether they were consistent or at
21 least eBay was consistent with equity
22 jurisprudence.

1 But I think it's generally been good
2 and has helped to solve a lot of what we're
3 calling the troll problem. But the 101
4 jurisprudence did throw out some of the baby with
5 the bathwater and I think just illustrates that
6 the Supreme Court is not institutionally well
7 situated to address these problems.

8 I think the PTO is an important
9 institution for helping, and I think ultimately
10 Congress is our main source for making the big
11 social decisions.

12 In copyright we do it every 50 or 60
13 years. We haven't really done it, at least on a
14 101 level, you know, in recent history.

15 MS. PERLMUTTER: All right, we are out
16 of time. I know there are still some questions
17 from the audience, and I think it's been a
18 fascinating conversation, so I would like to
19 apologize for not being able to get to all of
20 them.

21 But let me just close by saying really
22 the day has been intense, it's been long, but

1 it's been an absolutely full and very rich
2 discussion I think with a lot of illumination in
3 a lot of respects and also a tremendous amount of
4 food for thought.

5 I wanted to extend thanks to all of
6 the participants for sharing their ideas and
7 their time. And I also particularly wanted to
8 thank the team from the US Patent and Trademark
9 Office that came out here to make this
10 complicated, multi-city event work.

11 So in particular let me mention
12 Elizabeth Shaw, Hollis Robinson, Nadine Herbert,
13 and Linda Taylor who are all here among you. So
14 thanks to everyone.

15 (Whereupon, the meeting in the above-
16 entitled matter went off the record at 5:01 p.m.)

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A

- a.m** 1:11 6:2 134:19
abacus 338:20
aberration 25:19 80:17
ability 37:19 70:2
 100:22 134:7 165:1
 256:22 277:7 280:14
 291:20 299:21 318:8
 330:16
able 8:12 37:5,5 53:22
 54:6,14 55:8 60:5
 102:15 150:15 155:21
 156:17 163:14 199:12
 217:1 231:14 248:2
 262:18 268:6,10
 280:5 281:11 284:10
 290:20 291:21,21
 297:10 299:6 327:2
 331:14 349:1,8 354:3
 356:1 357:15 358:5
 405:18 415:19 428:19
above- 429:15
above-entitled 134:18
 244:16 307:2 366:17
abroad 287:18
abrogated 216:17
abrogating 422:2
abrogation 368:15,21
 370:18 374:4
absent 214:9 399:3
 414:21
absolutely 23:2 58:19
 63:19,20 225:15
 298:11 429:1
abstracted 153:1
abstraction 40:15
 91:20 152:5,21 153:6
abstractness 75:8
 79:15 364:2,3
absurdly 24:13
abuse 196:8 225:5,8,11
abuses 196:4 225:18
 227:3
abusive 402:19
academic 37:19
academics 60:17 71:15
Academies 373:19
academy's 237:6
accelerating 41:5
Accenture 414:1
accept 97:20 285:1
accepted 204:19,19
 212:2 215:16 368:17
access 148:11
accommodationists
 256:7
accompanied 372:22
 399:19
- accompany** 370:18
accompanying 16:14
 397:19
accomplish 32:20
 35:19 178:18 242:11
 333:14 371:19
accomplished 32:21
 33:14
account 73:21 82:20
 148:11 192:22 193:4
 283:18,19
accountable 362:18
accounting 42:18 82:18
 84:6,8,10,13 85:2,2
 85:10
accurately 7:4
accusation 276:14
accused 280:14
achieve 47:3 154:2
 156:1 181:5 250:22
 276:22 371:21
achieved 197:9 244:12
 253:8
achieves 52:4
achieving 48:9 151:12
 153:2,10 154:9,18
 155:19 157:5 179:3,8
 179:16,22
acid 132:2
acknowledge 193:16
acknowledged 30:6
 383:5
acknowledging 14:10
ACLU 108:20 109:2
acquire 298:5 426:20
acquired 298:5
acquisition 427:5
act 41:8 42:20 107:1
 235:20 236:6 238:11
 238:12,16 383:10
 386:3,5,7,18 387:10
 390:17 393:2 396:22
 397:13,19 399:8
acted 137:4
action 31:6 185:2 199:2
 255:6 341:9 344:8,11
 358:19 359:1 365:19
 368:12 391:16 427:11
actions 31:19 392:19
active 9:11 57:4 304:15
activities 12:22 147:7
activity 172:3 173:12
 175:5 177:4 266:4
 301:15 304:15 317:18
 321:8 366:2 378:1
 405:17
actors 301:20 407:21
acts 10:19 104:18 393:1
- actual** 49:15 123:19
 297:9 321:10 339:4
 388:9
ad 90:18 327:14
adapt 424:16
adapted 371:15
add 60:16 66:17 71:5
 72:18 95:22 101:12
 184:22 208:7 221:4
 226:22 293:13 342:8
 348:19 349:13 361:10
 369:19 370:2 372:8
 372:11
added 12:20 94:15
 122:14 372:17 399:9
 427:14
adding 25:4 87:9
 147:19 172:20 219:10
 398:13 399:12
addition 20:15 106:10
 193:22 314:11 372:11
additional 96:11 128:12
 145:11 182:19 324:1
 324:21 354:6 374:6
Additionally 16:7
address 140:3 160:17
 163:11,15 186:7
 187:18,19 196:10
 201:10 203:13 225:22
 237:3 245:22 255:7
 294:18 334:21 362:14
 363:4 367:14 368:6
 368:12 401:15,16
 402:19 408:7 410:21
 428:7
addressed 136:6
 160:21 187:6 198:12
 215:20 240:16 333:4
 333:13 334:16 375:9
 390:20 411:12
addressing 197:14
 198:17,22
adds 40:7 128:11 342:6
 372:22
adequate 69:5
adequately 163:15
 194:18 241:12
adhering 362:5
Adidas 101:20
Adjourn 5:22
adjunct 58:2
adjustment 399:6,8
administrable 370:6
administration 26:22
 185:19
administrative 16:9
 78:5 96:12 193:10
 427:15
- admire** 383:3
admitted 118:3
Adobe 258:8
adopt 425:18
adopted 162:18 308:2
adoption 11:17 141:5
 141:14 142:9,11
advance 15:17 161:2
 177:6 205:16 209:14
 252:2 254:5 299:1
 308:9 309:3 376:8,10
 379:9 394:11 405:20
 409:9,19
advanced 230:3
advancement 85:19
 121:3 376:6 380:4
 409:2 411:22
advancements 11:9
 252:22 253:5
advances 154:7 250:1
 251:1
advancing 82:3 307:22
 394:11
advantage 279:18
 356:11 358:16,17
 420:12
advantages 381:13
advent 396:14
adverse 159:15
advertising 24:3
advice 295:20,22 345:8
 346:4 362:5 364:15
 400:15
advise 261:2 297:11,12
 299:5
advising 172:10
Advisory 392:6
Advocacy 191:7
advocate 229:2
advocating 69:2
aesthetic 229:20 236:4
 236:8
affairs 1:12,15,15 17:15
 142:22 150:6
affect 164:20 176:5
 282:8 302:15 303:14
 303:16 304:11 316:11
Affinity 153:16
affirmance 168:16
affirmatively 230:3
affirming 168:15
afford 259:10 361:12
 405:7 407:16
afraid 29:5
afternoon 18:4,20
 205:9 211:2 321:20
 367:2 380:14 392:3
age 412:8

- agencies** 215:10
agency 9:14 12:3 38:3
 41:12,15,20 43:16
 106:13,16 124:9
 200:12 241:20 390:6
 391:11
agent 2:22 336:8 392:4
aggregate 173:2
agnostic 153:6
ago 11:11 20:17 32:12
 42:18 65:15 127:4
 129:20 158:13 161:6
 165:5 180:20 216:2,5
 219:13 238:9 295:15
 322:12 345:10 346:4
 359:3 362:4,11 364:5
 409:7
agree 44:16,19 74:5
 77:8 78:19 103:20
 126:1 147:10 172:17
 257:9 261:11 275:9
 278:16 294:3 350:10
 361:17 401:9 415:5
 421:1 426:11
agreement 119:21
 228:6 268:9 424:10
agrees 142:4 238:1
agricultural 212:5
Ah 340:11
ahead 21:17 22:11
 163:1 278:6 300:7
 333:2 366:15
AI 404:19 405:3,15,19
AIA 102:1 240:15 338:2
 338:3 363:7 372:10
 427:14
aim 287:13
aimed 407:11
AIPLA 2:10 72:21
 157:10,15 158:19
 159:6 161:17 162:6
 162:14,18 163:8,10
 163:21 172:18 185:14
 392:5
AIPLA's 158:4 159:6,9
 182:17
air 384:5,19
airplane 180:10,11
airplanes 152:11
 180:10
Alappat 32:12 65:15
 261:3,6,9,12
albeit 180:18
Alexandria 8:21 10:5
 17:4 20:2,17 21:15
 367:1
algorithm 47:1 49:14
 51:7 188:14 189:1
 190:5 220:8 339:8
 342:12 375:19,21
 377:19,20
algorithmic 189:7
algorithms 23:10 66:11
 156:13 282:10 339:16
 339:18 340:3,20,22
Alice's 25:10
Alice-based 100:3
 143:9
Alice-Mayo 99:17
 114:21 115:5
aligned 255:18 270:1
Alito 108:20
allegedly 118:2,6
Allen 2:17 5:2 247:20
 248:5 275:2 278:17
 282:1,15 284:18
 285:18 287:6
allow 16:22 57:7 91:8
 130:10 190:1 253:16
 280:7,11 281:19
 288:1 306:12 334:22
 418:11 421:11
allowance 97:3 171:15
 173:5,14 175:18,20
 175:20,21 176:2
 188:3,4 265:1 309:13
 309:20 311:12,13
allowed 48:17 79:11,12
 79:12 122:6 129:14
 140:9 251:10 278:3
 299:7 378:22 387:12
 387:13 395:22 398:19
 418:17,22
allowing 101:11,17
 139:14
allows 51:9 86:4 125:15
 149:6 150:21 228:14
alluded 79:10
alternative 76:12
 100:16 369:1
altitude 380:20
altogether 122:3
Amazon 153:16,16
 225:17 246:3 259:5
 286:8 336:9 345:19
 419:16
Amazon's 150:4 365:21
amazon.com 2:10
 181:22
amazonic 132:2
ambiguity 344:3
ambit 396:13
Amdocs 40:11 82:16
 114:17 119:19,22
 190:9
amenable 218:15
 221:15
amend 100:22 101:4,10
 102:3,4,16
amending 140:2
amendment 94:7,21
 95:1 100:14 140:17
 239:19 285:2 373:13
 373:16 421:20 422:9
amendments 101:17
 238:3
America 153:4 192:17
 196:11
America's 26:12 27:1
American 41:7 42:19
 139:7,7,8,8,19,19,20
 151:16 157:9 193:20
 193:21 196:18 197:10
 308:5 309:2 330:12
American's 191:15
Americanize 203:4
Americans 404:4
amicus 150:5 159:7
 196:6 205:21 293:11
 307:17 424:2
amorphous 202:15
amount 39:15,15 61:6
 83:2 86:2 88:2 98:11
 145:15 173:22 310:11
 316:4 319:4 427:6
 429:3
amounts 259:14
ample 224:7
Amy 1:22 17:19
analogic 50:6,12
analogies 50:17
analogy 55:15
analysis 12:16,21 14:3
 33:20 34:6,10 73:8
 75:9 78:17,20 82:8
 83:20 85:12,17 86:1
 88:5 89:3,17 91:9,21
 92:2 93:9 95:15
 136:13 138:11 143:20
 144:9 146:8,9 147:12
 148:12,16,21,22
 149:11,14 162:1
 168:11 171:4,18,21
 172:1,9,12 174:3,16
 176:13,15,17 177:2
 184:15,17,19 185:7
 251:22 314:4 317:15
 317:22 318:22 361:2
 406:22 411:13 415:9
analyze 14:22 53:19,20
 55:9 63:12
analyzed 312:2 367:20
analyzing 178:14 361:1
anarchy 407:11
anathema 154:11
ancient 366:2
and/or 15:18 31:20
 78:21 415:8
Andreesen 195:18
anecdotal 304:12
 425:10
anecdotally 220:17
 300:7 302:10
anguish 179:6
animal 218:17
animals 213:15
announced 10:3
announcement 20:14
annual 192:12
annually 309:7
answer 20:6 60:22 63:9
 65:7 79:10 92:1
 126:15 128:14 140:14
 140:15 141:3 177:21
 180:6 189:17 227:7
 228:15 232:17 233:8
 237:22 285:1 289:2
 343:5 346:12 356:14
 367:18 380:9
answered 65:8 150:13
 181:3
answering 237:21
answers 150:18
anti-cancer 212:17
anti-presumption
 98:22
antibacterial 107:21
antibiotic 212:17
antibiotics 212:22
anticancer 107:22
anticipate 77:21
anticipation 73:7
antigens 212:14
antitrust 238:16
anybody 67:8,9 75:2
 81:7 123:22 124:20
 133:7 180:6 183:11
 241:22 310:2 365:15
anymore 168:21 300:3
 352:9
anyway 218:20 347:17
apart 397:9
apologize 21:17 409:21
 416:3 428:19
app 233:15,20 234:3
apparatus 384:16,20
apparent 323:17,18
apparently 25:16 338:4
appeal 157:22 201:14
 233:11 364:7
appealed 347:22
appeals 27:8 82:11

100:18 326:12
appear 170:4 369:11
appeared 167:2
appearing 27:20
appears 161:14 291:2
 374:11
appellate 78:1
applaud 197:3
Applause 306:20
apple 55:16 241:13
applicability 371:14
applicable 94:22 134:1
 360:20
applicant 28:21 128:9
 161:20 176:1 179:4
 179:10 181:12 351:4
applicants 52:6 97:10
 97:11 98:11 158:1
 161:11 176:3 222:19
 251:10 278:2 291:19
 310:18 344:17
applicants' 28:9,10
application 11:15 52:8
 93:4 94:17 98:12 99:2
 99:13 100:21 108:3
 109:22 112:6 121:12
 122:1,5 123:16
 128:21 131:2 140:18
 145:13 146:21 151:12
 159:4,14 160:4
 161:13 162:14 176:1
 180:2 181:21 189:7
 255:3 257:16 292:17
 293:7 318:20 323:14
 341:21 345:12 346:5
 346:10 359:3 360:6
 362:10 363:14,22
 369:21 383:9 388:3,7
 388:11 398:4,15
applications 13:15 26:2
 44:18 56:4 59:3 91:11
 92:21 113:2,2 126:8
 129:15 212:22 213:13
 216:19 219:14 223:3
 253:20 254:1,4
 291:20 298:16 299:17
 309:8 310:9,10,12,18
 310:19 317:2 318:5
 319:15,20 320:4,9,14
 320:16,17,20,20
 321:15,16 326:11
 335:9 342:2,4 345:9
 347:22 351:5,14,19
 359:18 421:3
applied 14:21 85:13
 95:5 101:1 106:18
 110:9 136:9 159:22
 160:14 176:18 276:21

283:5 308:14 351:8
 360:16 375:16 376:18
 389:16 394:13 396:7
 410:11
applies 73:21 106:13
 112:1 253:19
apply 40:14 50:18
 53:11 54:17,21 98:8
 185:21 186:1 228:11
 255:2 264:18 274:16
 277:5 278:21 282:14
 288:4 291:22 308:7
 308:21 323:5 353:4
 363:11 387:4 407:22
 418:16
applying 15:10 50:21
 100:9 101:21 138:11
 163:15 185:17 248:19
 253:10 254:18 291:19
 346:16 351:5 407:6
appreciate 9:6 19:13
 74:1 197:15 255:16
 255:20
appreciates 157:11
apprenticeship 412:8
approach 49:14 51:6
 59:14 89:5 116:2
 128:3,4 131:6 186:4
 201:18 202:3,20,21
 203:2,4 219:10 232:2
 235:1,13 237:19
 253:11 287:8 308:22
 309:1 318:3,16 347:1
 347:2 367:16 374:10
 374:18 382:8 408:22
 409:2
approached 185:3
approaches 69:10
 78:12 235:5 237:11
 369:8,10,13 374:8
approaching 119:18
 406:11 420:22
appropriate 66:4,16
 74:16 77:3 191:16
 197:9 203:22 215:3
 216:1 278:21 361:9
appropriately 66:9
 141:11 239:21
approval 109:7 243:17
approved 107:19
 284:10 333:5
approvingly 292:9
approximately 264:19
apps 304:16,18,20
 316:5
arbitrarily 403:2
arc 38:1,4,7,16 44:4,5
 59:5,5 155:5

architecture 88:10,11
 166:10
area 17:22 29:16 30:3
 113:3 125:7,9,10,14
 126:18 128:3 180:22
 183:2 189:21 190:1
 190:18 199:15 200:10
 205:12 211:18 212:1
 212:10 214:4 218:13
 226:17 231:1,6
 232:10,19 256:1
 286:4 311:10 317:18
 376:19 377:1 390:8
 391:6 398:7 402:12
 404:12 409:15 410:20
 411:16 425:5
areas 16:3 81:1 113:20
 124:4 126:3 160:11
 162:20 173:20 196:17
 202:8 213:10 214:18
 219:3 230:10 249:17
 249:20 250:3 351:1
 391:6 402:5 403:6
 405:6 417:5
arena 80:12
arguable 124:16
arguably 10:19 96:22
 109:10 183:20
argue 62:21 264:4
 278:9 399:5 406:10
 414:8
argued 19:8 182:1
argument 63:7 89:22
 103:21 108:19 294:7
 295:6 344:10,18
arguments 28:9,10
 86:21 87:22 88:18,19
 118:19 139:4 177:9
 177:10,12 344:17
Ariosa 194:21 389:15
armed 301:20
Armitage 3:8 5:14
 366:22 367:2,5
 381:21 408:20 421:16
 421:18 423:11
arrangement 34:9,13
array 315:13
arrive 28:14 115:13
 118:7 127:15,21
arrived 10:13 118:22
 119:2
arrives 118:11
arriving 117:16 118:15
art 10:19 25:14,20
 34:14 35:11,21 37:2
 54:2,13 63:12 64:8
 77:7,10 89:13 93:20
 97:4 99:20 101:6,7

109:15 114:7 116:15
 116:19,20 117:6,7,9
 117:22 118:20 120:20
 146:3 147:1 149:4
 160:5 171:14 173:4
 173:15 175:19,19,20
 175:21,22 176:2,7,14
 177:12,15 184:14
 185:8 187:20,21
 188:1,8 230:10
 273:11 283:2 309:13
 340:10 342:7,8 348:5
 359:17,17,18 366:1
 383:8 393:4,12,19
 394:6 395:2 407:22
 419:19
artfulness 393:14
Arti 312:17
article 57:8 97:15
 162:10 182:16,18
 236:2 337:11 392:12
articulated 55:20 91:17
 128:8 229:8 282:2
 368:7
articulation 67:4
artificial 327:10 328:4
 335:5 404:18
arts 154:7 200:5 235:16
 235:19,21 250:14
 253:2 263:13 277:1
 337:13 371:3,10,12
 371:17 372:15,20
 373:7,7 374:10
 379:10 392:18 393:9
 394:2,5,14 400:2
 409:1,10 410:9,9
 411:2 414:7,9 415:15
 416:7 418:14 422:20
 423:9,20 424:3,18,19
aside 10:18 119:7
 286:22 312:20
asked 73:10 180:20
 275:13 385:15
asking 60:19 65:6
 150:16 205:22 206:1
 218:10 227:3
asks 34:21 168:8 199:1
 224:17
aspect 12:7 116:11
 189:13 305:22
aspects 41:6 173:16
 220:19 420:3
aspirations 154:21
assemble 371:21
assembled 90:18
assert 324:7,9 370:2
asserted 34:22 162:3
 166:11,16,17,19

402:9
asserting 165:7
assertion 42:11 43:2
 70:1 252:16 260:4
 276:15 315:3
asserts 402:2
assess 16:12
assessing 14:8 405:14
asset 131:4
assets 248:15
assigned 26:2
assignment 176:7
 177:16
assist 20:3 374:21
assistant 57:1
Associate 17:20
associated 166:8 324:6
 324:21 326:11,13
 373:2
Association 14:5 90:16
 157:10 206:5
associations 191:14
 205:20 206:7,8,8
assume 40:18 76:7,12
 76:18 99:11 139:5
 180:13 341:11 419:18
 420:9
assuming 52:8 410:3
assumption 97:20
 167:5
assurance 215:20
assure 181:17
AT&T 148:8
ATI 166:21
Atlanta 296:17
attach 180:10 366:6
attached 46:11
attack 285:9
attacking 152:13
attempt 117:8 140:4
 203:10 369:14
attempts 170:17
attendance 9:6
attending 16:17
attention 13:2 51:21
 173:21 207:4 354:14
 387:19
attorney 29:14,17
 280:15 297:3 362:5
 392:4
attorneys 56:21 264:19
attract 311:22
attributed 98:4
audience 7:10 19:21
 75:5 78:16 224:11
 327:4 338:10 428:17
audio 21:7 137:8
audit 28:17

Austin 307:17,19,21
Australia 206:9 209:15
 292:6,16 293:6
Australian 210:6
Auth 2:6 4:10 90:11,12
 90:13,14 120:8 121:5
 122:12,21 126:1
 129:10 134:6
author 104:7 397:13
authored 397:12
authoritative 390:6
 391:11
authority 104:21 106:8
 369:3
authorize 246:6
authors 103:4 198:14
 392:15
autoimmune 13:5
automated 377:20
Automatically 28:17
automotive 335:22
 404:8
availability 212:12
 243:12 403:14
available 138:10 162:11
 217:9 230:9 231:8
 236:7,14 308:17
 316:21 318:17 348:1
 363:15 383:12 391:14
avenue 100:12
average 54:14 193:4
 301:2 425:13
avoid 108:7 109:22
 179:20 184:7 268:7
 367:18
avoided 184:19
avoiding 127:18
avoids 379:12
award 155:10 426:11
awarded 152:16
awarding 181:10 326:4
 403:1
aware 239:4 329:15
awareness 349:12
awesome 322:20
awful 365:14
awkward 24:17

B

baby 195:17 279:21
 402:16 428:4
Bachman 2:9,9 143:2,3
 176:10 184:21
Bachmann 4:15
back 10:16 32:2 33:1,2
 33:11 34:19 39:21
 41:6 44:3 56:22 66:13
 69:16 70:14,22 76:5

80:4 85:11 87:13,13
 87:19,22 91:5 93:14
 95:15 120:2 128:17
 151:14,15 164:22
 178:20 183:16 198:20
 200:10,20 215:18
 216:2 228:10 235:16
 258:16 265:17 268:19
 276:9 278:17 280:15
 282:17 291:6 292:20
 300:6 306:22 329:3
 333:17 338:11 342:5
 350:17 361:3 365:19
 372:8 384:21 385:4
 385:17 386:13 387:21
 389:21 392:10 393:8
 399:4 412:7 421:2
background 10:12
 17:21 391:8 415:15
backup 242:11
backwards 272:21
 406:18
bad 25:3 69:18 72:10
 106:5 164:19 169:6
 170:17,20 176:22
 201:3 271:17 301:20
 325:1 331:1,6 354:10
 365:11 366:7 377:15
 407:21 411:7
Bahr 1:18 17:16 128:17
 142:18 149:18 157:6
 164:5 169:20 177:19
 178:9 180:3 183:4
 185:12 186:8,16
 188:9 190:20 346:15
balance 69:3 159:19
 197:9 276:5,16
 278:18 280:18 284:15
balanced 258:11
 276:10
balancing 187:20
ban 39:4
Banbury 370:12,20
 371:7 373:21
banc 206:2
bang 382:5
Bank 14:20 56:15 137:1
 158:18 194:12 257:5
banking 24:5
bar 38:9 91:3,3 121:19
 126:4 276:18 372:17
Barbara 157:14
bark 132:8
Baron 385:1
barrier 161:19,22
Bascom 27:21 83:20
 86:15 148:7,7 252:13
 376:13

base 364:8 388:3
based 13:9 53:3 74:11
 81:21 93:12 106:19
 114:8 121:8 124:3
 149:11 160:5 175:12
 212:8 242:5 245:13
 248:10 251:11,20
 264:7 283:2 313:5
 315:14 317:9 318:15
 318:15 350:11,11
 364:14,15 371:16
 411:9 413:18 418:14
baseless 323:16
basic 114:4 215:22
 235:4 237:9 304:18
 392:22
basically 121:10 123:3
 128:20 144:19 165:9
 165:11,22 167:3,6
 168:19 195:4 200:3
 224:20 238:10 251:11
 265:3 274:9 344:20
 364:3 424:9,12
basics 144:17
basis 108:7 129:5
 199:21,22 240:5
 272:20 308:19 311:5
 365:8 383:11 401:2
 412:3
basket 258:6
bath 195:17 279:21
bathwater 402:16 428:5
battle 43:16
battleground 330:11
beard 32:4
beat 258:3 331:6 332:2
beautiful 81:22 387:2
becoming 276:10
beep 217:12
began 38:7
beginning 138:14
 284:14 314:2 385:18
behalf 96:6 157:14
 170:2,5 191:20 192:3
 197:20 211:4 278:8
 392:9
behavior 326:6 402:20
belief 111:9 194:14
 422:17
believe 38:16 70:8
 74:19 103:17 113:12
 116:8 144:8 215:2
 252:18 282:14 298:9
 300:11 301:5 329:18
 330:1 331:19 369:12
 376:15 379:8 381:1
 399:18 407:6 410:7
believed 110:6 116:17

158:19
believer 345:17
believes 94:1 285:6
 422:22
bell 110:21 151:7
belonging 394:2
Ben 221:18
bench 38:9
bend 407:7
beneficial 169:15
 257:12 259:3 315:19
beneficiary 407:15
benefit 97:13 139:10
 189:19 226:17 273:1
 273:2,21 274:11
 325:5 354:5 361:13
 407:14
benefits 139:6 233:7
 270:13 361:14 375:21
benefitting 242:17
Benjamin 2:14 4:20
 197:19
Benson 23:11 59:12
 375:17 376:1 379:14
 390:11 396:10 414:16
Berghoff 103:3
Bergy 200:2 397:11,14
Berkeley 2:4 3:10 58:2
Bernstein 2:1 4:5 21:8
 21:10 29:12,13,14
 37:11 64:17 65:9
 76:16 79:16
best 16:15 39:12 40:16
 60:17 74:19,22 75:1
 90:20 128:3 150:8
 176:9 201:18 244:6
 318:16 343:17 345:16
 346:7 407:22 412:16
better 32:9 36:14,17,20
 37:1 50:5 52:12 76:11
 78:5 128:21 129:6
 143:19 144:1 146:14
 153:11 167:16 173:8
 189:4 202:3,10 215:9
 215:9 226:15 234:22
 254:1,1 269:7 270:1
 273:17 274:9 285:13
 287:15 327:13 329:15
 342:16 344:6 346:20
 349:14 378:8 394:20
 404:21 410:8
beyond 34:8,8 89:11
 194:16 202:1 220:10
 268:22 271:20 352:5
 413:4
bifurcating 232:8
big 32:5 118:4 127:13
 127:15 200:11 257:12

258:22 260:7 277:3
 285:4 286:3 294:22
 298:14,15 304:18,19
 327:15 330:7,19
 332:13,14,22 334:21
 335:4 340:17 345:17
 357:11 380:21 382:5
 425:20 426:10 428:10
bigger 109:10 381:21
biggest 170:13 343:17
 357:4,5
Bill 426:8
billable 331:21
billing 82:19 84:6
billion 301:10 309:7
 378:12 403:17
billions 207:1 248:11
Bilski 12:13 13:1 23:4,4
 23:7,13,14,15,17 24:1
 38:19 62:1 80:9
 105:14 141:7 167:22
 168:1 308:2 371:5
 373:8 377:14 382:4,7
 382:7 400:11 411:5
 414:2,14
Bilski's 12:17
binary 75:8 76:10,11
 77:15 89:3,18 113:13
bio 214:18,22 222:13
 235:5 367:11
Bio's 211:19,21 222:6
 228:17 229:7 236:10
biological 398:11
biologics 242:6
biomarker 315:16,21
 317:9
Biomarker-assisted
 213:12
biomarkers 220:6,9
 224:1 315:15
biomedical 206:21
biopharma 193:15
biotech 72:12 180:22
 359:10
biotechnologies
 217:11,14
biotechnology 2:15
 72:6 205:13 211:3
 212:10,13,15 217:6
 231:2 396:14 400:21
 403:8
bit 10:12 20:8 29:20
 30:5 33:3 62:11 74:6
 75:6 122:15 128:15
 143:4,6,11 145:1,4,17
 151:20 165:4 201:13
 201:21 204:7 219:5
 232:14 234:8 238:20

240:18,18 263:14
 270:18 271:2 299:10
 301:15 302:9 319:13
 319:18 320:3,5,12
 329:15 344:2 351:16
 378:7 425:3
Bitcoin 335:4
bite 241:13
bitterly 348:4
black 329:7
blame 43:6
blanket 105:16 292:2
blast 384:1
Blaze 2:20 321:22
blessings 107:5
blind 71:3
block 260:18
blocks 194:9,15 215:21
 237:4
blog 103:5
blow 249:9
blueprint 345:13 346:6
blunt 160:1,18 228:12
 365:11
Board 101:14 157:22
boat 383:4
Bob 17:16 366:22 375:6
 379:11 381:21 408:20
 421:16 423:9
Bob's 416:3
body 381:12 422:3
Boehnen 103:2
bogged 202:8
Boggs 2:8 113:1,6
bogus 266:11
boilerplate 25:12
book 207:12 296:15
 336:9,10
bookend 122:6
books 264:11 392:16
bookshelf 336:10
boom 137:6
boring 61:2,3
bother 166:5
bothered 64:19 365:15
bottles 269:18
bottom 70:6 321:1
bouncing 33:2
bound 195:3 200:17
boundaries 51:17
 74:17 98:3 109:17
 141:19 148:20 149:2
 213:20 216:19 394:22
bounds 400:14
Bowman 105:14
box 390:20
boy 156:14
brainstorming 288:19

Branch 103:14,15
breadth 394:14
break 18:17 134:15
 306:22 350:20
breast 14:9
breathed 238:18
breeding 212:15
Brest 1:10
Breyer 103:22 154:12
 207:9,19 388:1
brief 7:1 17:8 196:6
 203:9 205:21 293:12
 366:18 382:20,22
 383:7 385:14 389:20
 399:7,9 424:1,1,2
briefing 168:9 257:1
briefly 10:11 71:5 87:1
 144:12 157:11 183:14
 226:22 264:16 316:7
 339:7 381:18
briefs 159:7 382:6,18
 389:19,20
bright 133:22 141:14,15
 404:1 414:18
brilliant 427:3
bring 125:16 149:5
 168:4 207:2 259:17
 366:15 387:18 413:17
bringing 192:18 251:16
brings 202:10
broad 11:9 46:19 49:1
 84:19 105:16 125:10
 159:20 160:10,15
 162:3 172:1 180:18
 206:10 213:21 238:17
 288:3,13 289:20
 338:18 364:4 395:5
 395:15 396:13 400:20
broader 6:16 51:12
 99:7 188:18 220:19
 289:9 290:4 353:18
 393:22 414:10
broadest 364:7
broadly 41:2 47:9,9
 49:5 206:18 234:9
 312:21 384:18 396:1
 396:19
broke 328:7
broken 201:2 347:16
 400:10
brought 20:5 42:19
 105:22 124:10 137:10
 138:14 148:22 165:6
 180:5 210:9 293:16
 353:11 375:17
brush 234:9
bubble 427:10
bucket 50:3,19

bucks 294:22
buffeted 41:13 69:20
buffeting 70:14
build 134:8 279:17
 281:4 282:11,12
 303:18 328:12,17
 330:19 332:7 365:3
 424:12 427:1
building 194:9,15 202:7
 215:21 237:4 248:7
 254:9 273:7 284:14
 331:2 335:8 343:22
 363:21 420:7
built 19:19 20:8 245:18
 248:13 253:15 273:19
 279:14 288:6 330:15
bullet 186:15 187:13
 199:6
bumping 149:8
bunch 46:17 49:10
 65:22 66:11 271:3
 347:15 350:3 379:18
bundle 42:8
burden 42:21 43:14
 95:2 161:21 182:10
 324:1
burdened 324:21
burdens 101:5
burst 427:10
bushes 130:10
business 32:18 38:22
 42:13 45:19 48:3
 56:17 57:8,10,11 73:1
 73:2 80:14 96:19 97:5
 97:6 104:14 129:22
 136:16 137:1 141:22
 166:13 191:10 236:17
 247:1 249:18 260:5
 279:10 302:15 313:5
 315:12,14 322:11
 324:5 330:20 332:13
 332:22 334:22 352:8
 354:17 356:15 361:2
 363:9 377:3 411:6
 414:21 416:21 417:12
businesses 96:17
 97:12 137:18,19
 168:22 191:12 266:5
 323:22 324:15,17,20
 326:18 330:7 343:14
 355:13 420:8 425:1
busy 381:12 388:15
butting 361:11
button 135:6
buy 331:22 356:4
buying 246:2
byplay 33:9

C

Cabbage 296:14
Cabeca 1:18 18:1
 220:16 289:7 290:15
cabinets 336:11
calculations 66:10
calculus 286:13
calibrate 353:15
California 1:11 2:2,4
 3:10 37:17 292:14
 351:10
call 39:8 74:11,12,13
 107:12 120:16 151:22
 172:5 183:5 227:17
 259:10 330:9 338:17
 360:13 363:8 395:7
 406:19
called 152:6 156:12
 262:5 307:15 317:7
 344:1 368:15 369:13
calling 15:21 16:7
 151:4 317:7 381:20
 428:3
calls 397:17 398:7
camera 292:19 293:4
camp 224:6
Camps 224:6
Canada 206:8
Canadian 210:6
cancer 14:9 132:12,15
 132:19 223:22,22
 313:14
candidate 182:4,14
 189:10 190:15
candor 37:19
cap 331:12
capabilities 35:1 36:9
 36:13
capability 146:15
capable 162:14 396:19
capacitors 35:17
capital 27:9 71:14
 335:22
capitalists 270:7 300:2
 300:16 302:11 332:21
 425:12
capture 7:4 179:8
captures 353:5
car 336:2
card 20:4 134:3 246:1,8
cards 7:11 19:22
 245:20 272:10
care 47:16,17 153:5
 263:10 378:16
careful 40:14 226:9
 241:14 369:10 417:8
carefully 43:1 105:13
 235:9 409:21 416:3
 423:18

carried 107:14
carry 331:14
cartoons 151:3
carve 234:18
carving 195:15
cases 10:15 14:3 15:14
 30:9 34:12 35:17 38:8
 38:8 39:2 45:15 48:20
 49:11 58:6 59:5,9,12
 60:8 61:18 64:20 68:4
 78:17 79:11,12 83:17
 86:18 92:6 95:6 98:17
 98:21 99:11 105:5,5
 105:19,21 106:3,5
 107:9 112:4 114:15
 114:16 116:2 119:22
 125:21 127:11 129:6
 133:17 139:12 151:4
 151:8 153:15 159:1,8
 160:2 162:5 166:22
 167:4,13 171:5,15,19
 173:8 177:17 178:1
 178:10,15 181:4
 184:19 187:8 194:6
 194:13,13 219:16
 252:13 260:1 267:17
 277:10,17 280:11
 288:17 315:7 320:14
 323:2 325:7 326:4
 329:9 347:8 361:4
 376:13 378:21 381:7
 384:13 388:16 394:22
 406:9,21 408:9
 427:13
cast 7:2,17 8:1 78:16
catalyst 137:4
categories 10:20
 158:11 159:11 160:9
 160:21 372:7 405:5
category 26:13 40:5
 42:12 397:10
caught 13:2 229:10
cause 43:8 76:1 400:12
caused 426:7 427:17
causes 75:18 133:21
 334:20
causing 43:3 400:18
caution 44:1 164:22
cautionary 416:6
cautioned 159:20
cautious 126:19 260:8
 382:8
caveats 314:3 317:22
 319:1
CBM 101:4 173:7
CCPA 397:11
cDNAs 14:17
celebration 333:8

cell 338:8
center 191:6 192:3
 348:11 370:12
centers 97:4 192:12
Central 292:13
centric 352:8
cents 290:13,15,16
centuries 413:4
century 198:11 204:17
 219:8 387:16 398:13
CEO 296:14 321:21
CEOs 296:13
cert 111:8 195:5 200:11
 205:22 207:7
certain 35:19 62:16
 95:14 131:14 162:9
 181:8 199:9 202:8
 205:2 217:9 218:14
 223:14 233:10 274:21
 283:5 315:10,11,12
 319:15 351:15 359:16
 359:18,18 377:22
 379:15 394:22 402:12
 405:9 417:4
certainly 77:15 109:3
 121:5 143:20 221:7
 225:4 228:16 232:13
 241:1 246:15 247:17
 272:11 279:8 284:11
 284:13,15 292:15
 293:10 295:11 378:19
 379:7 381:3 391:2
 406:12 411:3 421:8
certainty 163:19
cetera 24:6 80:14,14
chair 256:5
Chairs 307:16
Chakrabarty 59:11
 108:6,7,17 109:6
 396:12,20 399:4
challenge 138:19
 259:16 277:3
challenged 111:16
 125:14 344:5
challenges 138:1,13
 257:14 273:8 322:16
 379:4 396:9
challenging 6:21 12:2,6
 325:3 378:20
Chamber 2:13 191:5,9
 191:20 196:3 197:12
 224:13 225:1,15,20
 226:9 240:21 425:6
Chamber's 191:7 192:2
 192:11
chambers 191:13
chance 254:2 284:18
 332:9 421:16 422:10

change 10:19 18:6
43:19 70:12 85:2
121:2 187:5,8 203:11
211:1,14 238:22
257:8 261:16 298:15
346:18 426:8
changed 22:17 42:6
108:15 135:22 136:20
187:2 199:6 334:8
343:12 357:21
changes 14:14 16:9,10
42:19 164:20 176:3,5
186:19 272:1 280:12
314:16 375:12 420:2
changing 405:8
chaos 418:2
chapter 361:22
character 108:11
characteristics 14:12
55:6
characters 395:9
chart 341:5 342:11
charts 341:6 392:17
chat 7:16
cheaper 153:11
check 258:5
cheering 41:16
chemical 14:14 108:13
chemicals 414:12
chemistry 223:11,13
224:2,2
Chen 308:10
chest 332:2
chests 332:14
Chevron 106:13
Chiang 2:6 4:11 95:20
95:21 96:2 102:14
128:1
chief 1:12,14 17:14
104:12 261:6 307:14
358:1 413:2,22
Chien 2:19 5:6 266:1
312:12,13 350:1,8
353:9 354:21 355:15
357:1
Chien's 411:13
China 57:6 72:19 73:1
73:13 217:15 287:20
352:22 379:1 398:18
China's 407:18
Chinese 72:22
Chirag 2:7 4:10 81:15
choice 76:10,11 167:7
263:4
chooses 402:6
choosing 72:1
chorus 38:13
chose 319:9

Chris 108:20 109:2
142:21
CHRISTIAN 1:19
churn 360:13,17,18
361:6,18
circles 154:5
circuit 15:9 16:2 19:8
27:16 30:4,17 31:10
31:15 32:11,21 33:1,4
34:9,11,12,20 39:6,20
40:9,20 44:3 48:22
49:11,17 65:16 78:3
91:22 92:6 94:2,10
95:14 100:18 103:17
110:14,19 111:4,6
114:15 116:5 119:20
127:11 137:1 148:13
150:13 153:14,18
157:2 159:8 161:6
168:15 181:4 182:1
189:22 195:2 200:18
206:1 252:13 253:9
254:17 257:16 277:10
290:2 291:3 292:7
308:12 360:14 376:15
396:17 406:13 409:14
Circuit's 12:14 101:19
257:18 261:5
circuits 32:21 35:16
125:3
circular 417:16
circumstances 223:2
citations 336:22
cite 194:1 388:16
cited 109:6,7 121:11
309:11 310:8 395:17
cites 30:18
citing 117:13 292:8
civil 330:10,10,14
335:14
claimed 13:8 14:7
15:11 34:13 51:16
77:5 86:14 93:11 94:6
101:15 114:6 120:19
218:18 249:8 250:20
252:1 286:15 373:2
384:18 396:1 399:15
claiming 36:2 51:22
114:3 119:13 121:20
141:12 154:9 160:15
386:12
Clara 2:19
clarification 136:12
clarified 144:4 276:18
clarify 94:21 149:10
219:22 251:9
clarifying 82:13
clarity 63:16 128:12

138:15 194:2 196:13
197:7 202:10 225:13
226:12 241:2 244:11
271:10 305:22
class 26:3 31:4 60:17
60:18 61:3 292:19
293:9 318:15
classes 129:13
classic 239:14 402:15
cleaning 203:17
clear 38:3 74:16 116:22
117:7 127:13 136:9
137:7 149:2 164:22
169:2 194:6 206:18
208:16,20 224:16
254:8 261:1 276:3
291:1 293:18 311:8,9
321:2 341:18,22
372:8 378:3 389:15
390:19 399:19 401:13
407:13 412:21
clear-cut 143:21
clearer 187:7 261:15
311:10
clearly 7:3 27:20 34:13
44:6 72:8 95:10
113:15 117:4 131:5
149:5 193:6 253:20
259:15 261:11 286:20
339:15 340:7 386:22
406:17 419:12
clerks 58:7 381:14
client's 272:17 344:22
clients 63:14 79:17
88:15 172:10 205:14
305:1,2 361:12
climb 202:9
clinical 199:10
clip 365:18
clock 19:9 215:19
398:14
cloning 204:20 240:11
close 28:11 39:7 88:22
90:8 125:21 244:14
245:10 381:20 411:2
416:17 428:21
closely 80:20 164:2
263:3 292:5 294:6
302:10
closer 299:14 377:3
closet 203:17
clothes 390:2
cloud 213:5 250:4
318:21
clouds 341:1
CLS 14:20 158:18
194:12 257:5
clue 115:1 127:4

CMBR 101:9
co- 397:12
coal 336:2
coalesce 291:3
Coalition 198:11
204:16 219:8
coalitions 202:7
coasts 268:6
code 84:12 87:17 284:2
297:8 304:9 342:20
342:22 345:18 363:18
coded 398:15
codes 282:13
codified 371:22
codifies 202:13 203:16
codify 140:4 204:4
238:5 305:21 371:3
cognitive 404:17 405:4
coin 273:2 279:7
Cold 370:12
collaboration 322:2
collaterally 285:9
collating 85:1
colleagues 205:19
235:7
collected 84:14 272:11
collecting 24:9 87:5
collectively 206:4
Colleen 2:19 5:6 266:1
312:12
color 324:11
com 285:18
combat 301:3
combination 28:4
145:14
combinations 35:18
combined 220:9
come 39:7 43:5 66:13
68:2 70:5 82:7 84:21
86:11,19 110:4 112:2
127:12 143:14 186:15
190:22 213:5 217:19
217:20 232:1,21
235:1,12 238:8 239:5
266:1 268:1,20,20
269:6,14 271:2 273:1
273:2,14 275:20
284:7 313:15 336:2
340:12 341:3 349:19
363:3 366:5 367:21
381:14 385:4,11
387:8 408:8 420:6
comes 20:7 70:13
123:13 131:20 156:11
167:21 180:17 190:10
226:3,4 227:1 264:3
272:1 306:5 309:17
318:4 328:9

comfort 141:13 237:8
comfortable 273:12
 377:8
coming 8:8 50:1 56:7
 56:21 135:11 150:12
 167:1,16 168:11
 180:22 224:13 261:22
 287:22 304:21 396:16
comingling 183:6
commend 247:22
commends 150:14
comment 20:21 35:5
 53:16,22 62:2 63:18
 182:20 183:7 241:19
 271:13 279:5 352:14
 362:21
commentary 155:9,12
 179:2 224:18 244:7
 249:6
commentators 72:20
 227:18
comments 16:8 20:15
 20:18,19 21:2 81:8
 112:10 128:2 142:19
 149:19 157:7 164:6
 169:21 177:20 183:5
 183:12 192:3 197:16
 198:10,15,16,19,20
 204:17 225:4 249:2
 270:20 271:1,14,15
 272:6 301:7 312:10
 316:22 321:3 327:12
 328:5 346:15 357:15
 374:20 414:9 415:5
 421:19 425:7
commerce 1:16 2:13
 7:21 21:20 23:1,22
 56:19 80:13 191:5,9
 191:21 192:22 197:12
 224:13 225:1 394:16
Commerce's 425:6
commercial 142:8
 213:14 223:3
commercialization
 212:4
commission 42:11
 316:13
Commissioner 17:17
committed 9:14 197:13
committee 21:10 90:18
 158:6 307:17 392:6
 396:21
common 45:12,20
 49:19 67:12 82:3 86:9
 93:2 116:2 124:2
 126:21,21 129:5
 133:15 134:7 140:8
 202:16 209:12 238:11

253:14 271:7 390:18
 394:3
commonalities 83:19
 86:14,19
communicating 24:5
communication 184:13
 378:5
Communications 50:14
communities 256:14
 274:10
community 12:2 14:5
 15:15 211:7 243:2
 256:18 270:5,7
 274:13 275:21 285:5
 285:12 353:8 400:15
community's 13:2
company 57:3 224:20
 245:9,13 246:4,18
 247:11 249:11 274:2
 285:21 288:8 296:1,3
 299:5,6 300:5 305:5
 307:14 310:1,2
 315:16 316:10 322:12
 325:6 350:15 354:1
 354:16 356:8 358:1
 363:21 404:16 414:2
 425:17 426:9,12,21
company's 135:19
comparative 78:17
 381:13
compare 59:17 95:6
 210:4 264:20 405:15
compared 53:20 275:1
 290:6 388:8
comparing 24:9 222:1
comparison 30:8 37:2
 78:20 79:1 289:19
 290:11
compartmentalize
 228:14
compatible 342:12
compelling 344:17
 345:1
compensated 357:6
compete 217:10,17,20
competition 26:10
 354:6
competitive 196:11
 247:14 325:3
competitiveness
 193:21 218:2
competitors 345:13
 346:7
complain 58:11 125:2
 156:6 401:18
complaining 45:3
complaint 262:17
 268:12 365:21

complaints 228:17
complete 25:17 280:11
 365:5 373:15
completed 390:11
completely 214:9
 226:20 342:14 384:12
 384:13 391:20 410:20
 415:12 419:14 421:13
completing 87:18,19
complex 16:20 163:13
 174:17 186:10 420:2
compliant 163:4 183:3
complicated 66:21
 202:5 355:16 429:10
compliment 322:4,6
comply 127:16
complying 94:16
component 108:22
 300:5
components 12:22
 142:7 241:6 251:21
 361:1
composition 10:22
 93:16,22 108:15
 144:21
compounds 212:17,19
comprehend 53:10
compressed 357:8
compression 250:4
computer 15:6 25:7
 29:15 30:2 31:7 33:6
 33:17 34:5 35:1 36:4
 36:8,13,13,19 37:7
 46:21,21 47:2 49:15
 51:8 65:4,12 66:15
 76:22 80:13 84:12
 87:17 92:8 115:12
 129:21 146:13 147:8
 147:17,18 166:8,10
 172:21 175:6 178:12
 188:18 249:19 250:2
 250:3,19 251:1,21
 252:2 253:5 282:13
 284:2 286:12,15
 298:19 327:18,19
 336:17 338:9,17,18
 338:19 339:2,5,5,17
 375:20 390:14 406:6
computer-based 14:22
computers 35:3 142:2
 261:8 327:18 345:20
 405:17
computing 250:4
 404:18 405:4
conceive 404:10
conceived 180:1
 181:11 263:21
concentrated 248:15

249:17
concept 23:7,8,21
 24:18 28:5 30:21 31:5
 31:12,17 51:14 53:17
 54:4,8 75:8,19 92:13
 122:4,7 123:15
 126:13 150:21 154:20
 156:2 174:15 176:6
 288:5 291:10 361:17
 372:19 373:3 385:12
 387:9 416:17 417:13
concepts 13:14,15
 31:14 208:21 209:12
 209:18 250:19 368:10
 372:19 376:4
conceptual 282:4
conceptually 44:17
 263:15 294:2
concern 45:17 113:22
 113:22 119:11 129:1
 159:5 192:7 194:11
 208:15 213:10 225:9
 228:20 234:21 266:18
 296:9 376:2
concerned 159:13
 182:22 214:11 232:18
 233:5 250:7 268:16
 375:14
concerning 103:10
concerns 69:11 71:2,10
 161:17 162:6 163:9
 163:11 185:16 193:11
 196:4,5,7 199:4
 215:19 237:3 294:19
 308:13 311:17 312:7
 368:7 382:13,14
 410:22
conclude 309:15
concluded 15:3 42:12
 216:15
concludes 312:10
conclusion 28:15 47:21
 117:3 118:12 148:17
 222:2 254:16 258:17
 367:22
conclusions 34:6 319:4
concrete 21:20 22:20
 23:1 80:12 106:18
 162:17 253:4 398:4
concurrence 99:1
 291:6 411:3
concurring 27:17 371:4
 373:8 423:18
condition 333:19
conditions 160:6 369:4
 397:4,16,21 399:22
conductive 393:12
conduct 197:2

- conference** 9:7 370:12
370:16,20 371:7
373:21 406:20
- confess** 38:12
- confidence** 42:2 172:13
- confident** 319:12
- confirm** 116:6
- confirmed** 308:12
- conflated** 148:18
- conformity** 356:16
- confusion** 25:4 68:1
157:17 159:2 185:17
194:4 224:16 225:10
407:21 412:21
- Congress** 26:6 27:15
41:3,10 74:7 80:18
106:7 161:5 200:4,5
203:22 214:17 215:10
216:1,18 227:12
229:3,4,22 235:16
236:11 241:5 255:6
256:12 268:20 284:4
337:20 367:10 368:22
369:3 370:21 374:19
381:3 390:15,22
401:7,11 408:8
409:22 417:4 419:19
423:7 427:9,14
428:10
- congressional** 201:16
215:2 226:7 368:12
393:1 410:2
- connective** 274:9
- cons** 186:13
- consensus** 140:22
206:10,17 287:12
- consequence** 107:14
- consequences** 29:1
107:10 140:1 141:17
241:11 302:7 355:5
391:18
- consider** 28:3,12 84:18
108:13 136:17 163:11
169:12 216:1 251:22
333:18 337:22 352:13
359:22 377:3 379:19
- consideration** 59:18
115:9 141:9 146:7,17
176:18 244:5 308:7
- considerations** 139:2
144:11 149:16 240:13
- considered** 11:3 13:3
85:20 87:8 93:9
113:21 174:17,19
215:5 247:10,10
317:5 334:6 379:16
385:9 388:21 389:18
424:5
- considering** 169:11
185:8 232:7 252:19
258:20 283:4 389:4
- considers** 13:17 86:8
146:9 184:16 407:18
- consistencies** 350:18
- consistency** 97:13,21
98:3 100:13 271:4
353:7
- consistent** 108:17
159:10 218:13 231:3
295:2,7 350:21
351:22 352:4 373:7
380:5 397:18 427:20
427:21
- consistently** 98:8 100:5
100:9 156:7 185:22
186:1
- consisting** 396:2
- constant** 371:15
- constantly** 126:10
- constituencies** 262:20
- constituency** 262:22
263:7,7,9,11
- constitute** 141:20
- Constitution** 199:22
235:17 240:6 337:3
337:11,16,19,22
338:12 340:9 352:16
392:13 394:8 419:20
- constitutional** 230:1
365:8 371:10 372:13
424:16
- constitutionally** 250:12
367:22 371:15
- construct** 80:1
- construction** 88:4
89:11 168:9 190:11
406:3
- construe** 190:7
- construed** 85:12 87:14
179:7
- construing** 179:17
- Consulting** 3:11
- consumer** 26:9 315:19
364:8
- consumers** 192:20
354:5,11
- consuming** 118:1
323:22
- contacting** 259:9
- contain** 289:1
- contains** 91:6 222:18
373:22
- contemplates** 31:2
- contemporaneous**
396:12
- contemporary** 371:11
424:8,13
- content** 104:5 148:10
148:10 223:10,18
317:8 327:13,13
334:13 375:5
- CONTENTS** 4:1
- context** 33:3 37:4 65:7
101:2 103:12 119:8
136:7,18,18 180:21
229:3 273:18 385:6,8
427:5
- contingency** 27:10
- continually** 419:22
- continuation** 6:11
- continue** 8:19 9:19
16:12 111:1 130:5
163:17 197:10 213:16
254:19 277:17 325:4
356:3 365:2 372:5
379:6 407:20
- continued** 159:2 163:12
- continues** 12:11 39:14
64:21 249:12 414:3
- continuing** 213:10
360:2
- contours** 1:5 6:18 10:8
111:18,20 135:19
140:7 156:4 215:13
241:20 339:8
- contrary** 249:7 258:1
- contrasted** 31:10
216:21
- contribute** 43:12 112:8
112:20 179:4 242:13
371:17 372:15,20
422:20
- contributed** 56:18
178:22 179:9,14
181:18
- contributing** 154:10,15
371:2
- contribution** 114:7
153:21 251:12 254:15
- contributions** 16:17
424:17
- control** 37:1 66:8 67:3
317:4,11,21 320:9
338:21
- controlled** 139:17
148:11
- controlling** 30:15 36:22
65:19 66:7 329:17
- convened** 1:10
- convenient** 393:11
- convening** 211:10
- Convention** 209:7
- conventional** 61:20
62:4,10,20 64:7
109:13 147:19 166:9
249:19 379:17
- converge** 140:10
299:20
- converging** 254:13
- conversation** 216:6,14
218:1 265:8 428:18
- conversations** 262:4
263:17
- conversely** 175:6
- converts** 168:7
- convinced** 422:8
- cool** 152:9,16 154:22
- copy** 25:12 285:8
- copying** 285:7
- copyright** 391:6,12
428:12
- copyrighted** 394:12
- copyrights** 420:5
- cordial** 41:13
- core** 8:20 97:15 317:7
319:20 320:15,20
321:14
- corporate** 173:22
- Corporation** 2:6,11,21
96:4 135:16 158:18
164:10 275:8 307:15
- corporations** 325:4,8
- corps** 277:16
- correct** 90:22 94:2
177:15 214:13 354:19
418:16
- correction** 138:7
250:11 408:3
- correctly** 135:2 228:1
306:1
- correlation** 221:14
- correspond** 246:4
- cost** 48:6 167:6,11
168:19,21 177:7
222:11 260:6 301:1
324:4 331:20 332:3
347:1 365:1
- costly** 27:8 323:19
- costs** 48:5 259:18
280:10,16 313:18
323:12 324:21 326:11
326:13,13
- couch** 86:12
- couches** 328:15
- counsel** 96:4 112:22
135:15 164:9 171:1
211:3 248:6 307:14
358:1,10 364:15
413:22 426:18
- counsels** 274:3
- count** 345:2
- counted** 405:19

counterparts 353:19
counterproductive
 196:18
counting 328:9 349:16
countless 152:13
countries 69:9 73:12,21
 78:14 207:15 209:8
 215:12,15 217:1,4,10
 217:19 230:6 289:17
 352:22 353:14 355:2
 355:4,8 357:3 419:13
countries' 192:13
country 9:1 32:18
 153:20 267:1 268:22
 294:12 353:21 404:11
country's 192:16
couple 20:16 76:4 84:2
 84:2 88:8 145:19
 146:1 147:4 148:3
 205:19 267:22 268:4
 269:18 270:21 279:22
 291:14 295:17 296:13
 300:8 359:3 413:20
 416:6 421:19
couple- 132:10
course 20:15 41:15
 52:10 62:11 82:7
 101:19 119:6,19
 126:15 127:14 138:7
 166:17 167:5 179:2
 179:14 182:3 189:12
 228:21 238:1 250:11
 257:13 265:7 293:18
 298:3 398:2 401:2
 408:3
court's 14:2 39:22 41:6
 68:2,3 91:16 92:10
 96:16 99:7 123:13
 135:21 139:3 158:22
 159:14 212:21 213:21
 215:19 216:16 249:16
 251:17 308:2 369:18
 372:2 382:8 400:10
 415:20
courtroom 19:9
courts 12:2 40:13 45:11
 47:12,12 49:20 55:20
 59:7,20 75:7 79:8
 95:2 96:11,15 98:5,7
 100:16 105:6 110:10
 112:3 124:17,18
 127:6 133:18 138:2
 140:8 144:14 145:20
 148:1,5 150:10
 157:21 159:4 161:22
 163:14 178:10 194:16
 213:19 214:10,21
 215:9 226:12 239:20

240:5 252:8 253:16
 306:13 360:14 379:12
 379:16 380:3 398:10
 399:4 406:10 408:6
 410:18 411:1 415:18
 427:11
cover 48:8 84:4 178:16
 228:18 359:10 368:8
 417:12
covered 176:9 236:16
covers 178:3,15
CPC 318:14
CPUs 166:11
crack 221:18
craft 237:7 393:19
 398:20
crafted 371:19
cramped 402:21
crank 227:7
create 15:21 95:8
 156:20 159:2 241:10
 247:4 256:22 267:9
 274:8 297:1 304:19
 315:13 317:4 327:13
 333:18,21 345:14
 404:2
created 11:17 14:17
 158:20 163:8 193:11
 199:18 203:19 217:7
 252:5 280:6 317:11
 364:6 386:6 408:9
creates 9:21 257:14
 403:5
creating 238:22 239:7
 248:1 255:8 345:12
creation 191:19 192:10
 236:4 237:9
creations 229:20
creative 192:19 197:11
 213:17 413:9 418:20
creatively 174:1,22
 175:9
creativity 216:22
 229:21 237:1 383:9
creators 256:19
credit 245:20 303:18
 385:22
criteria 182:19 192:14
critical 6:21 26:14
 85:19 97:16 184:6
 387:17 401:2
criticism 141:4
criticisms 143:22
criticized 39:11
critics 401:17
crop 212:14
cross-licensing 242:18
crucial 23:20 262:19

crush 335:17
cryptography 339:19
cuckoo 398:14
culled 148:13
Cullen 2:13 4:19 191:2
 191:3,4 224:10 225:2
 231:19 232:12 240:20
 242:22 243:21
culling 138:17
culminated 396:10
cunning 393:15
cup 165:14,17,19,20,22
 166:4,5 365:16
curb 225:7
cures 132:19
curious 67:9 183:11
 188:22 275:2 290:8
currency 308:15,17
current 10:7 16:13
 87:11 111:3 123:1,8
 140:6 164:21 169:14
 169:15 170:18 171:2
 171:11,19 187:10
 206:11 255:4 290:5
 296:10 337:19 359:9
 394:1 395:6 398:5
 404:13 405:20 415:3
currently 95:3 96:3
 170:3 206:15 240:1
 281:6 360:9 391:3
 403:5 420:3
customer 304:19
customers 152:18
 348:12,17
cut 332:1
cuts 51:17
cutting 41:6 69:16
 403:6 404:17
cycle 74:12 136:15
 138:17 233:14,16,18
 234:7 318:5
cycles 314:18

D

D.C 78:3
dab 179:21
Dallas 8:17 135:11,11
 307:8 346:14 357:15
damage 42:5 43:2,18
 280:13
damages 426:10
damaging 404:11
dance 343:4
danger 239:12 241:7
 355:11 425:20
dangerous 232:15
 268:21,22 302:21
Daniel 2:17 5:2 255:11

255:14 265:15 275:3
 280:20 284:17 306:7
data 24:10,11 69:22
 70:4 83:2 84:14 86:2
 86:9,10 87:18 116:17
 133:19 138:10 166:20
 192:14,15 242:4
 291:2 301:18 335:4
 338:6 339:18 351:17
 352:5 356:1,7 411:12
database 116:13,16,18
databases 327:17
daunting 58:4
David 3:9 5:15 330:6
 375:2
day 18:10 19:5 33:11
 48:12 58:9 59:2 65:18
 103:6 223:1 258:2,15
 265:13 293:18 296:8
 296:8 307:11 309:12
 328:8 358:11 366:21
 375:9 428:22
days 105:20 168:5
 243:6 290:20 291:7
 375:18
DC 322:5
DDR 83:20 86:15
dead 369:11,12
deal 47:13 61:8 63:14
 74:22 77:3 88:15
 132:21 200:11 202:6
 259:8 276:13 287:19
 349:14,16 354:11
 421:5
dealing 96:18 124:2
 201:21 227:22 262:9
 269:22 274:6 389:12
deals 202:11 353:8
dealt 23:5 59:19 64:4
 227:20
Dean 2:10 4:15 149:20
 149:21 178:1,7,19
 180:20 183:14 188:11
 189:2
death 249:8 406:14
debate 12:12 60:20
 214:9 215:11 227:2
 227:12,18 228:6
 414:2 417:3
debated 129:11
debates 410:2
debit 245:19 303:18
decade 166:18 167:17
 216:2 248:13 427:8
decades 137:20 138:10
 213:7 361:1
deceive 117:9
December 1:8 158:4

163:7
decent 198:16
decide 31:6 50:13
 111:20 116:1 118:2
 131:2 165:19 177:17
decided 18:11 24:1
 25:5 65:15,18 67:14
 95:7 114:19 127:11
 167:10 258:3,15
 304:16 364:8
decides 168:12 204:1
deciding 37:3 115:9
 127:7 161:1 165:12
decimate 257:20
decipher 266:10
decision 25:10 30:19
 33:1 56:8 57:6 59:2
 96:17,20 104:1,13
 108:6,12 111:8 112:3
 115:2,14,16 120:2
 123:14 126:22 133:20
 138:6 158:22 167:22
 200:2 212:22 236:18
 239:16 246:5,21
 249:1 251:17 253:10
 257:18 261:5 265:14
 267:4 290:2 291:13
 292:5,6,13 308:2
 313:7 318:4 350:10
 356:6 360:12 385:7
 390:12 396:11,12
 406:14,16 411:3
 415:2 417:2 424:2
decision's 104:6
decisions 12:9 39:6,21
 39:21 40:21 41:5,6
 92:4,11 97:5 103:10
 105:1,6,14 106:14
 107:10 124:1 135:22
 136:3 137:3,13,15
 138:15 157:18 158:21
 161:7 172:12 208:17
 238:14,19 239:17
 248:19 249:15 260:12
 291:6 292:16 303:4,6
 313:21,22 329:12
 368:3 384:12 391:21
 396:17 400:11 409:14
 414:16 415:20 428:11
declare 406:3
decline 138:14 312:22
 314:2 319:7,21 321:2
declined 194:18 195:5
 315:3
declining 320:11
dedicated 191:14
deemed 101:14 393:6
 403:3

Deemphasize 177:9
deep 17:21 325:4
deeper 165:20 166:4
 180:16,16
deeply 175:14 381:7
default 202:22 203:5,12
 329:10
defend 152:12 251:6
 259:13,21 333:10
defendant 48:5 83:7
defendants 138:3 150:9
 280:15
defending 191:15 283:3
 311:18
defense 260:6 268:9
 415:11
defensive 172:11
defer 106:12 232:15
deference 98:4
deficit 424:22
define 35:20,21 123:3
 129:2 140:22 188:16
 189:6 190:19 229:10
 229:13 230:4 235:8
 235:15 236:21 287:11
 287:16 335:7 369:4
 373:6 400:14 416:17
 417:9
defined 129:4 138:12
 215:14 394:2,4
defines 34:14 95:10
 129:8 235:2 422:22
defining 10:17 130:13
 174:1 367:17 371:16
definitely 280:17
 286:19 298:8 356:18
 364:22 371:20
definition 22:17 30:7
 40:12 77:16,19 80:11
 89:10 93:12,14,18
 188:19 189:1 416:8
 417:14,16,17 418:14
 423:9
definitions 418:15
definitive 115:17
definitively 103:18
 104:8
degree 161:4 336:7
 351:20
degrees 2:20 234:5
delicate 159:19
delighted 8:11
delineation 138:16
deliver 152:10 365:22
delivering 180:9 183:17
 392:8
demand 153:4 266:11
 300:17 303:8

demanding 305:2
denial 200:11
denied 206:12 207:17
 395:5
Dentons 2:3 52:20
Denver 8:17 81:15,22
 135:1
deny 160:1 195:1 201:6
Denying 195:14,21
Department 192:21
 214:12
departure 212:1 382:10
depend 197:8 355:17
 356:15
depended 317:19
dependent 115:18,22
 117:19 351:12
depending 174:5
depressed 319:18
deprived 27:6
depth 165:20
Deputy 17:17 211:2
 244:21 248:5
derivatives 108:1
derived 108:14 213:3
DES 339:18
describe 13:22 119:10
 122:15 194:18 235:20
 249:18 281:22 288:2
 395:13
described 92:17 121:21
 165:11 235:14 236:2
 250:1 370:16 395:12
describes 52:9 173:13
 235:21
describing 10:12
description 11:6 181:2
 181:9,16 188:13
 395:20
descriptive 116:1
deserve 48:22 215:20
 418:5
deservedly 49:18
deserves 132:16
design 52:22 216:13
designed 47:19 49:2
 369:17
desirable 16:10 48:16
 96:12 97:22
desire 15:20
desired 250:21 407:8
desk 273:10
desperation 423:13
despite 150:8 173:15
 195:5 209:19
destroyed 415:12
destructive 398:6
detail 30:6 83:14

201:10 254:6 270:15
 288:16 343:2 385:3
detailed 87:2 184:15
 204:15 408:21
details 101:12 161:8
 243:15 252:7,12
 316:20
detect 223:12,21
detecting 221:2
detergent 222:8,15
determinant 302:14
determination 13:12
 58:14 63:5 147:22
 406:1
determinations 98:5,9
 99:3 100:10,14
 159:18
determine 30:9,20 40:3
 53:18 106:20 263:2
 264:17 342:17 401:15
determined 14:13
 147:6
determining 13:8 53:12
 54:16 112:8 340:21
deterrent 301:1,19
detractors 139:5
detriment 327:20
Detroit 8:17
Deuel 110:22
devalued 96:21
devastating 107:16
develop 233:19,21
 254:19 369:1 378:15
developed 11:10 100:6
 102:5 122:20 137:17
 162:8 163:3,5 183:1
 217:2 289:4,4,6 340:4
 344:7 395:7
developing 14:9 336:2
 420:7
development 16:5
 45:20 104:2 114:4
 140:7,12 205:15
 211:22 233:14 234:6
 250:10,15 254:12
 267:1 346:6 378:13
 399:2 403:13 404:17
developments 96:9
 97:18,22 130:3 216:3
 254:22 255:5
deviate 19:1
device 166:20 339:3
 393:5
devices 344:13
devil 239:14,14
devise 241:20
devote 189:13 419:12
dexterity 393:15

- diagnosing** 221:5
diagnosis 421:12
diagnostic 109:9
 110:11 213:9,11
 219:9 220:5,5,18
 224:4,7 233:17,21
 317:6 320:16 350:4
 353:13 410:20 411:11
 412:20
diagnostics 221:11
 223:6,9 243:13,16
 312:18,22 313:4,10
 314:1 317:8 320:20
 356:7
dial 228:10 268:19
dialing 164:22
dialogue 142:16 214:20
 218:4
Diamond 64:20 67:10
 67:19 68:8,10,12,16
 68:18 136:20 137:13
 396:11
Diane 2:11 4:14 135:1
dichotomy 376:7
dictated 80:18
dictionary 393:10
 418:14
die 48:18,22
died 48:21
Diehr 23:5 59:10 64:20
 66:12 67:10,19 68:8
 68:10,13,16,18
 109:20 136:20 396:11
 397:1 399:4 414:16
differed 14:18
difference 80:9 120:19
 283:19 318:12 351:2
 353:16
differences 54:1 233:12
 340:22 359:16
different 14:11 16:3
 18:5 24:20,22 43:17
 51:9 55:21 60:10 67:3
 67:20 69:10 72:7
 73:15 78:12 84:15
 112:3 133:18,18
 134:9 145:20 146:2
 147:4 148:3 149:3
 152:11 153:11 154:3
 155:21 156:16 172:7
 181:5 182:2 183:15
 193:3 209:22 223:2,3
 224:12 228:6 232:4,8
 238:22 275:18 276:4
 283:14 285:8 293:18
 293:19 309:11 313:15
 314:5 350:15 351:21
 352:11 355:1,2 356:9
 380:18 410:1,21
 419:7,8 423:10
differential 117:1
differently 75:15 229:1
 234:2 294:8
differing 355:11
difficult 53:10 54:17,21
 69:19,21 70:6 99:14
 100:19 119:5 131:1
 161:11 177:17 183:9
 185:22 209:2 221:7
 239:5,8 240:9 252:3
 282:16 314:1 343:16
 378:6 398:10
difficulty 22:3 75:9
Diffie 339:18 340:1,16
digital 26:12 80:22
 396:14 398:11
digits 245:20,22 246:3
dignity 154:6
dimensional 165:9,10
diminish 373:10
diminished 194:2
dinner 288:19
diodes 35:17
direct 124:18 198:9
 212:21 227:15 230:16
 257:21 260:18 290:15
 324:7
directed 12:18 13:17
 15:4 30:13,21 31:4,7
 31:11 33:17,18 40:4
 47:5 49:13,14 51:5,6
 51:7,15 53:14 54:12
 76:15 87:19 91:7
 113:16 114:22 120:7
 136:14 138:18 145:9
 168:13 252:1,17
 338:19
direction 71:19 94:3
 292:2 376:16 377:7
 379:6 404:11
directions 69:21
directive 26:7
directly 284:18 308:13
 352:18 404:3 407:12
director 1:12,15,17
 7:22 9:10 17:14 18:2
 96:3 135:17 142:14
 158:5 171:4 191:5,22
 342:13
disagree 44:18 74:6
 75:16 105:3 302:1
disappeared 27:11
disappoint 189:3
disassociated 152:22
discern 54:15 161:12
disclose 178:17 183:19
 231:9 242:16 298:22
 345:16
discloses 178:4
disclosing 114:10
disclosure 101:12
 251:12 341:17 345:9
 346:4 355:7,14 362:6
 411:21
disconnected 150:17
discourage 402:7
discourages 403:13
discourse 95:22
discover 216:12 334:19
 385:16
discovered 213:2
 387:15 393:4
discoveries 209:8,16
 337:15 352:18 383:9
 385:19 386:20 387:12
 392:21 421:3
discovers 208:9
discovery 169:7 171:22
 259:20 280:10 352:17
 353:3,3 387:8,12
 389:17
discrepancies 210:12
discretion 101:18
discriminate 196:12
 231:22
discuss 82:9 89:20
 178:1 248:2 328:19
discussed 89:14 186:5
 350:19
discussing 15:17
 164:16 265:10
discussion 6:21 8:8
 16:18 17:3 33:4 34:9
 36:15 57:5 89:3 99:12
 112:21 113:8 170:19
 204:16 208:16 211:19
 225:7 259:5 355:1
 367:6 376:5 408:16
 415:9,13 429:2
discussions 10:2
 173:18 227:17 230:19
 311:16
diseases 13:6
disfavor 308:20
disfavoring 308:18
 311:7
dismiss 28:10 119:8
 168:4 259:17
disparaging 117:5
disparate 150:16
dispatch 180:11
displaying 24:8
disposing 171:5,18
disproportionate 174:8
 176:11
disruption 255:9
disruptive 137:15
dissect 379:17
dissection 379:13
dissent 90:4
dissents 291:7
distances 395:9
distinct 98:17
distinction 23:20 46:13
 49:12 151:11 154:19
 157:4
distinctions 45:22
 110:17
distinctive 108:10
distinguish 91:14 101:6
 101:7 107:9 110:7
 208:21 424:4
distinguished 245:5
 295:20
distinguishes 72:10
distinguishing 13:14
 292:9
distorting 405:21
distributed 82:21 85:15
distribution 85:18
distributor 88:9
district 82:16 98:5,7,19
 100:16 110:10 127:6
 138:2 148:12 173:7
 213:16 292:13 341:10
 360:13
dive 175:14 200:10
diversity 133:15,20
 202:12
diverted 251:5
divided 392:13
dividing 133:3
division 127:14
DLA 343:18 364:16
DNA 14:18 218:21
DNAs 218:16
docket 39:16 150:5
 164:14 350:16
dockets 167:12
docs 103:5
doctrine 44:3
document 54:12 325:22
documented 43:2
doing 30:7 36:3 42:5
 50:20,22 52:10 58:21
 66:9 84:22 86:20
 106:21 111:18 127:5
 168:6 183:15,18,21
 239:12 263:18 272:2
 284:7 302:16 303:14
 310:4 312:17 329:21
 330:22 331:11 332:6

348:6 374:5 383:22
391:5 393:13 394:17
411:19,20 425:17
dollar 32:17 166:12
dollars 48:1 138:4
207:2 248:11 259:21
266:8 301:2,10
323:21 414:4
domain 154:14 215:22
286:9 405:19
domestic 56:9 218:2
230:14
domestically 357:3
dominated 351:3
doom 258:17
door 141:20
Dorothy 2:6 4:10 90:11
90:14
dosage 13:8
dosages 13:5
dose 44:1
dots 396:2
doubled 258:14
doubt 183:17 422:20
Douglass 390:12
downside 231:5
dozen 159:7 325:21
382:19
Dr 90:12 102:19 120:8
draft 88:15 113:1 202:6
221:8 234:16 253:20
253:22 268:10,12
298:16 299:16,17,18
344:19
drafted 73:5
drafting 160:16 218:18
draftsman 117:9
drag 270:11
dragon 366:12
dramatic 233:12
dramatically 137:12
321:7
drastically 97:3
draw 44:22 45:21 49:12
133:5 166:6 360:21
drawback 116:14
drawing 11:21 166:2,5
222:2 380:1 389:5
drawn 13:11 141:3
403:4
dream 328:18 331:3
338:21
Drennan 2:7
drew 83:19
drive 191:18 193:8
279:12 380:8
driven 214:10 382:13
driver 138:20 302:18,19

312:8
drives 9:20 326:6
driving 69:13 74:8 75:9
405:4
drop 71:12,13
dropout 327:21
dropped 268:14
drug 13:5 43:13 74:8
109:1 213:12 233:17
233:21 234:8
drugs 107:21,22 192:18
212:16 243:13,17
drying 305:1
duck 152:2
due 8:10 21:7 35:14
321:2 417:15
dumb 188:6
duplicative 151:1
156:22 370:4
Durie 44:14
Dutra's 424:1
DX 317:7 319:20 321:14

E

e- 56:18
e-commerce 26:5,9
188:2,5 214:4
earlier 10:4 84:5 107:8
123:7 128:18 130:12
172:16 202:13 211:16
214:1 224:19 230:13
263:6,20 275:6
289:13 293:15 300:11
318:19 352:1 353:11
357:5 362:15 373:21
383:1 385:18 389:5
410:17 411:9 417:12
419:15
early 46:18 48:18
131:17 167:3 168:5
169:4,6 172:13
242:12 290:20 291:7
377:18 378:2 395:17
399:1 424:22 427:9
ease 40:9 344:2
easier 101:10 149:7
217:15 315:12 325:22
398:12 407:19
easily 42:7 133:22
228:15
Eastern 82:16
easy 50:16 108:7 160:1
185:21 186:14 261:7
287:10 366:4 426:16
eat 344:18
eating 195:19
eBay 427:12,19,21
ebb 43:16
echo 128:1 213:22
271:5 345:5
eclipsed 325:7
ecommerce 340:5,10
economic 22:21,22
23:16,19 24:6 25:6
26:18 142:13 147:9
155:20 191:18 192:10
193:8 197:11 267:1
401:3 404:19 412:6
economically 152:9,17
economies 56:20
Economist 413:3
economy 9:13,20 81:1
142:6 153:4 195:12
196:8 206:21 270:11
308:16 309:18 325:1
330:12 335:12 404:2
408:12
ecosystem 96:7,14
97:14,21 102:8 142:8
142:10 167:20 245:16
246:9 283:10 284:6
284:12 304:7 305:14
314:13 332:17
edge 403:6 404:17
editing 240:11
EFF 255:14,17 257:2
259:8 260:7 292:18
293:11,11
effect 38:14 48:17
73:16 79:4,6,14,19
121:18 176:7 209:17
289:12 299:2 301:19
374:1 399:1 416:7
425:9
effective 62:14 109:18
347:2
effectively 9:18 193:19
278:20 373:6
effects 97:9 290:7
292:11 377:1 410:10
420:11,18 425:18
efficiencies 163:19
efficiency 169:5 184:9
309:1
efficient 153:12 172:10
184:10 185:6,9 347:2
efficiently 9:18 64:4
169:17 171:5,14,18
175:12 177:6
effort 98:1 232:1 235:12
365:1 374:3,18
efforts 10:1 137:20
150:8 169:1,2,11
268:19 369:14
eight 42:18 301:9
309:12 320:18 336:1

either 33:14 41:3 66:14
66:15 75:10 128:9
183:13 185:9 241:4
416:9 427:1
either/or 225:21
elaborately 398:15
elected 104:19 105:2
214:20
electric 153:15 395:6
electricity 337:8
electromagnetism
383:20 395:7
electronic 2:17 24:10
25:20 80:13 255:11
340:5
electronics 66:22
425:22 426:3
elegant 347:1 394:10
394:19 399:7
element 26:14 145:14
elements 28:3 32:21
93:10 101:13 145:12
145:15 146:6 174:17
174:19,20 399:15
elevate 251:19
eligible 6:18 11:13,22
14:13 34:10 60:21
83:16 85:6,8 86:18
91:15 92:3 106:5,6
109:4 136:6 138:16
147:7,14 196:15
202:22 203:5 252:9
253:12 254:13 261:8
277:14 329:1 334:18
384:17 397:3 409:17
421:9 423:1 424:5
eliminate 32:19 38:20
201:12 355:8 373:11
eliminated 276:16
Elizabeth 429:12
else's 285:7
embodied 295:3
embodiment 369:21
embodiments 179:19
emerge 140:9
emerged 230:12
emerging 252:11
404:20
emperor 390:2
emphasis 10:14 174:9
176:11 413:1
emphasize 63:3 89:18
149:13
emphasizing 89:6
empirical 71:11
employees 427:2
employing 404:3
empowered 161:20

- en** 206:2
enable 181:6
enabled 180:8,12,13,17
 180:18 195:20 320:17
 320:19 406:6
enablement 11:6 48:11
 181:2 345:17
enabling 160:20 238:11
 238:12 317:12,14
 320:9 321:16
enact 370:21
enacted 27:15 236:12
 394:8 410:4
enacting 372:10
encode 105:9
encompass 47:6
encompassing 394:15
 396:19
encourage 169:10
 176:3 255:1 269:7
 277:15 279:15 352:21
 353:6 402:6
encouraged 376:3,14
encouraging 250:15
 305:14
encryption 339:18
endeavor 424:5
endeavors 11:10
ended 168:15
endorse 411:4
endorsed 418:13
endorsement 99:7
ends 327:4 343:20
 369:11 406:21
energy 189:6 190:18
 313:14
Enfish 27:21 30:6,18
 34:19 36:15 40:13
 46:5 50:14 76:5
 114:16 115:2,11
 116:9 117:3,13
 252:13 376:13
enforce 227:6 362:1
enforceability 400:20
enforceable 403:1
enforcement 27:10
 137:14,19 142:7
 172:11
enforcing 288:21
engage 278:20
engaged 262:13
engagement 263:22
 264:7 335:6
engaging 45:12 263:20
 265:6 278:11
engine 2:18 154:1,4
 156:18 181:13 197:11
 261:19 262:6 266:14
 278:8 393:4
engineer 52:22 53:16
 54:4,5,14 62:6
engineer's 71:17
engineered 243:6
engineering 53:5 54:9
 327:19 363:15,17
 394:1 414:5
engineers 53:21 55:8
 248:10 275:3,9
 332:15 338:16 426:14
engines 153:19 155:13
English 153:1 336:21
enhance 84:13 280:12
enhancement 85:13
enhancements 85:14
enhancing 41:5 85:9
 87:20 88:1 280:14
enjoys 173:14
enlarging 98:3
enlighten 61:11
ensure 11:14 102:5
 144:8 176:18 193:7
 299:3
ensured 276:20
ensures 93:6 252:22
 408:11
ensuring 100:5
enter 296:21
entered 27:16 246:2
enterprise 191:16
 234:4 413:10
enterprises 43:3 206:6
 426:1
enters 316:10
entertained 143:15
entire 39:9 42:12 96:22
 316:17 422:3,7
entirely 152:11 199:18
 201:13 278:16
entities 42:12 137:11
 137:16 300:21 351:8
 351:9
entitled 208:10 429:16
entity 165:7 358:3
entrants 425:16
entrenchments 311:18
entrepreneur 327:1
 328:13
entrepreneurs 205:15
entrusted 105:1
enumerate 202:4
environment 192:16
envisioning 234:19
enzyme 222:8,15,18
enzymes 212:16 213:1
EPC 287:8
episteme 393:19 395:1
EPO 78:18 299:7
 352:22 353:17 410:11
equal 139:10 154:6
 175:18
equally 140:17 142:9
 194:17
equations 65:22 66:1
equipment 223:7
equipped 47:13 99:16
equitable 308:22
equitably 308:17 311:5
equity 427:21
equivalent 73:6 399:19
era 383:2
eras 393:17
Ergo 24:3,7
Eric 2:12 4:17 169:22
 185:5
erode 356:12
err 125:21
erring 125:6
especially 100:6 125:5
 149:22 170:22 187:16
 189:21 193:14 198:4
 261:7 281:11 298:4
 322:3 352:2 353:13
 380:17 398:9 410:19
 414:2 425:15
essence 281:21 353:6
essential 189:12
 206:20
essentially 31:17 35:8
 73:1,4 114:2 115:20
 118:11 195:16 218:19
 231:10 295:19 300:20
establish 161:5
established 136:20
 192:9 330:4
establishes 402:21
estimate 51:1
estimated 301:8 309:6
estimates 264:14
estimation 376:17
et 24:6 80:14,14
ETF 258:6
ethical 234:20 240:13
ethos 152:6
ETS 280:21
EU 416:9,10,12,14
 417:1 418:3,4
euphemism 364:4
Europe 78:13 79:4
 163:2 217:16 287:19
 289:10 290:6 354:2
 371:6 378:22 379:2
 398:18 418:11 424:14
European 79:17 202:20
 203:2 206:6 209:6
 210:4 230:22 290:11
 371:14
Europeans 121:17
 424:15
evaded 127:16
evaluate 309:22 310:2
 310:7 312:9
evaluating 419:22
evaluation 308:8
evening 367:3
event 7:2 142:15 170:7
 257:11 298:4 305:14
 363:7 429:10
events 377:11
eventually 138:17
 353:15 361:19
ever-evolving 130:7
everybody 236:3 239:4
 274:12 281:4 338:7
 358:18
everyone's 329:9
evidence 148:4 181:17
 199:4 218:12 321:8
 350:10 362:22 398:22
 424:21 425:2,10
evidenced 180:1
evident 14:3
evil 335:17
eviscerate 159:21
evolution 124:2 202:16
 277:10
evolve 140:9 238:13
evolved 67:12 227:22
evolving 10:8 97:17
 290:1,19 291:22
exact 19:9 116:13 154:2
 341:18
exactly 150:20 153:10
 153:13 154:16 155:19
 155:20 180:21 195:12
 293:4 299:13 318:6
 339:22 340:13,17
 382:20 404:13 424:15
examination 17:18
 64:11 98:4 100:1,4,6
 117:17 157:17 182:5
 184:7 186:20 189:11
 190:16 211:12 226:15
 277:16 322:19 344:15
 360:2 377:9
examinations 310:10
 325:11
examine 342:1,3
examined 73:12
examiner 28:20 63:6,10
 63:11 64:1,5 84:21
 131:1 132:18 157:15
 161:17 220:7 273:11

- 291:22 293:3,7
322:18 325:15,22
341:7 345:21 349:4
358:21,22 365:18
366:2,5
examiner's 149:6
273:10
examiners 24:8 25:12
28:3,8,12 50:11 52:6
58:15 60:3 62:13,14
87:10 117:18 128:6
149:13 161:19 220:12
255:2 261:2 269:7,15
272:20 273:1,5,17
277:5 291:19 292:3
322:16 323:6 326:5,7
326:10 344:14 345:3
346:16,20 347:3,10
347:20,21 348:4,4,7
348:10 378:3 419:10
examining 99:15
237:13 252:14 341:20
348:10 419:12
example 30:8 38:19
42:1 54:22 60:10
64:18 65:2,14 66:3
92:3 98:7,14 101:8,11
105:7 107:11 110:13
140:18 147:13 148:6
152:2 163:2 165:14
169:3 190:4,8,15
203:15 209:15 210:2
210:3,12 212:7 216:6
218:16 225:17 229:3
236:1 289:19 323:14
339:17 355:18 365:16
366:3 402:15 403:16
405:4
examples 6:15 49:21
50:17 59:17 60:1,1,7
60:19 61:7 63:20 64:2
106:18 147:5,20
175:14 194:1 212:13
220:22 230:17 259:6
267:22 360:21
exception 12:19 13:11
13:19,22 14:10
113:20 128:22 145:10
227:18 236:13 368:15
368:21 369:18 370:19
372:3 374:4
exceptions 11:18 13:18
16:15 45:13 122:17
122:19 123:1 140:5
158:13 159:15 162:9
199:17 201:17 202:4
203:21 204:4 227:8
228:11 229:8,16,22
234:16 235:3 240:1
exchange 114:10
316:13
exchange- 258:1
excited 20:13 271:11
exclude 26:7 196:17
205:2 233:2 237:17
417:2
excluded 113:21 160:8
204:1 209:10 379:2
383:8 417:5 419:14
exclusion 138:7,9
235:8
exclusionary 113:19
159:21
exclusions 201:13
203:1,1 234:18,20
235:14 237:15 416:19
exclusive 12:15 141:14
337:14 392:15,20
395:11 405:18
exclusively 104:8
exclusivity 242:4
executable 345:19
execute 342:21 345:21
executive 103:14 158:5
191:4
exemption 216:7 237:7
337:17 366:7 373:17
exemptions 12:1
exercise 337:1 369:3
419:20
exhaustive 203:3,7
235:12
exhumation 57:7
exist 410:22
existed 120:20 146:10
existence 21:20 22:20
23:1 80:12
existing 22:18 122:19
213:5 300:22 369:15
370:4 372:6 413:13
413:14 425:15
exists 109:19 152:5
161:22 206:15 264:10
278:16
expanded 145:21
expansion 137:8
411:15
expansive 137:4 139:6
139:9 140:1 142:12
159:14 367:16 374:17
422:15
expect 256:10
expected 209:2 377:16
expecting 188:12
expending 95:3
expense 72:13 169:7,8
323:20
expensive 48:12
167:13 182:12 268:7
356:5 378:15
experience 106:10
110:18 143:7 157:16
167:17 169:13 199:7
201:21 217:3 219:7
219:20 223:19 259:7
322:15 336:7 413:22
experiment 216:9
257:17
experimental 216:6
expert 28:18,22 78:2
171:22 181:19 232:16
425:5
expertise 99:16 104:22
106:11,14,17 112:1,2
226:14 381:13
experts 6:6 26:13
339:11,12 403:18
explain 93:3 150:15
171:7 174:2 253:20
254:4 378:5 381:16
explained 104:17 156:2
172:15 180:13 261:6
explaining 38:10
explains 150:22 151:7
154:8 156:4,21 391:7
397:19
explanation 213:14
250:21 261:15 394:5
explicit 368:5 422:19
explore 99:16 100:8
163:9,17 240:18
402:18
EXPLORING 1:5
exports 193:5 403:16
403:21
exposed 256:13
exposing 326:10
express 53:1 415:6
expressed 196:7
236:11 377:11
expression 155:6
expressions 317:16
expressly 203:2 372:2
372:12
extend 331:8 429:5
extends 11:14 386:20
extensive 384:22
extensively 344:9
extent 15:17 16:4 59:22
63:22 95:15 122:17
170:19 177:13 200:17
215:13 218:11,14
219:6 225:14 230:16
240:15 243:9 294:17
362:9 370:1 379:15
extra 369:1
extra-statutory 211:22
extraction 132:20
extrapolated 23:21
extrapolation 24:13
extraterrestrial 338:22
extreme 107:15 422:13
extremely 46:19 80:20
119:5 182:10 259:3
394:15
eye 9:4
eyeball 166:3
-
- F**
- fabulously** 365:10
face 46:6 101:5 111:1
217:18,22 265:18
faced 78:2 406:17
facing 273:8 415:22
427:16
fact 26:12 39:14 49:2
95:5 99:15 107:5
111:7,9,20 132:13
140:14 154:6 168:12
181:11 184:4 195:6
196:2 207:19 230:7
238:5,6 263:21 264:6
296:7 301:8 329:11
341:10 342:3 362:17
384:17 401:1,1 406:2
406:15 418:10,22
factors 316:1
facts 60:8 110:22 112:5
112:7 133:20 161:8
factual 110:16 415:9
fail 267:9 340:8 365:14
failed 137:8 141:11
407:4
failing 199:10
failings 381:17
failure 141:2 328:21
389:10 398:22 407:17
fair 43:6 99:22 121:1
132:1 133:13 270:6
364:4 427:5
fairly 77:15 158:10
355:16 375:7 377:18
408:21 422:8 426:13
faith 407:5
fall 50:4 374:8 403:3
414:6
fall's 42:10
fallen 320:5
falling 162:8 163:5
398:17
falls 50:19 95:10 397:9
false 323:13

- familiar** 96:14 145:8
familiarity 269:15
famously 195:18 426:7
fans 260:7
fantasy 365:5
far 10:16 36:11 167:4
176:10 182:22 189:15
194:16 200:14 211:17
214:8 219:17,18
250:6 256:7 269:21
361:5 398:11 416:18
far-reaching 139:22
farming 367:11
farms 377:21
fascinating 428:18
fashion 85:15
fast 328:12 424:7
faster 146:14 403:20
fault 263:17
favor 139:3 177:9
305:20 306:11 308:20
409:1
favorable 67:13,16
favoring 308:18 311:6
favorite 339:14
FDA 107:19 242:5
fear 61:2 127:15
feature 73:3
features 57:12 93:4
94:4
federal 12:14 15:9 16:2
19:8 30:4,17 31:10,15
32:11 33:1,4 34:20
39:20 40:9,20 42:10
44:2 48:21 49:10,17
65:16 91:22 92:6 94:2
94:10 95:14 100:18
101:19 103:17 110:14
110:19 111:4,5
114:15 116:4 119:20
127:11 136:22 148:13
150:13 153:14,18
157:2 159:8 161:6
168:15 181:4 182:1
189:22 195:2 198:7
199:1 200:18,20
202:20 206:1 252:13
253:9 254:17 257:15
257:18 261:4 277:10
290:2 291:3 292:7
308:12 360:14 370:14
376:15 396:17 399:3
406:13 409:14
federation 104:13
191:10
fee 27:10
feedback 6:20 9:3
170:7 256:5 322:2
323:1,4 326:17
feel 95:13 161:20 178:6
256:20 271:15 279:2
282:21 283:13 285:1
296:19 325:15 364:14
378:17 421:8
feelings 293:19
fees 280:15 323:21
331:8
feet 293:4
Feldman 2:2 4:6 37:13
37:15,16 68:22 69:14
74:1 77:13 270:16
300:10
fell 14:9
fellow 232:16
felt 77:16 297:6
fencing 344:1
fervently 39:9
fewer 377:14
Fiacco 157:14
field 26:7 85:14 113:3
115:19,22 117:19
188:5 194:21 195:20
217:6 228:11 248:16
253:1 256:20 281:4
305:9 317:10 324:13
403:2,15 414:5
fields 87:21 162:12
216:20 230:9 236:14
381:15 392:14 403:8
403:12 408:11 424:11
Fifteen 305:17
fifth 359:19 372:21
Fifty-five 266:6
fight 331:22
fighting 339:14
figure 123:11 124:7
133:4 417:20
figured 132:13 319:3
figuring 412:16
file 249:13 254:10
287:18 324:2 336:11
344:10 358:3 359:12
378:16 382:6,7
427:15
filed 21:1 159:7 181:21
219:15 262:17 266:6
268:13 293:11 349:2
362:3 370:13 382:19
383:2 385:14 389:19
389:20,20
filling 48:4 57:16 73:19
101:3 188:4 196:6
263:19 288:20 323:20
326:11,12 343:12
filings 205:21 218:12
314:7 315:2 319:9
filling 215:7 252:12
filming 292:18 293:9
filter 62:11,12 75:1
177:5 189:12
filtering 87:5 148:9,10
148:10
final 75:3 89:16 112:13
307:6 311:15 335:19
383:18
finally 94:8 104:8
168:17 203:16 259:11
270:21
finance 405:6
financial 15:1 147:9
172:3 173:11 175:4
177:3 245:15 282:8
304:7 335:15
financing 311:22
find 39:5 45:8 48:15
66:20 76:1 122:8
126:9 134:10 146:20
209:8,12 210:4
213:20 262:15 263:2
264:13 265:5 266:12
293:3 304:4 321:11
337:17 338:5 341:8
366:3 367:15 374:16
407:22 415:20
finding 160:3 172:13
177:10 251:15,19
279:22 406:2 408:10
finds 387:9
fine 62:11 223:18 231:1
232:13 318:2 337:4
384:18
finger 190:17
finish 241:9
fireworks 77:20
firm 44:14 112:22 113:6
170:22 205:11,18
firm's 53:2 264:21
firmly 337:10
firms 266:13,15 267:8
267:19 300:16 343:17
345:7 407:14
Firstly 170:2 171:3
173:21
firsts 246:11
fish 2:14 205:12 259:10
410:21
Fisher 2:20 5:7 321:19
321:20,21 345:5
346:1,3,22 361:21
fit 129:6
fitful 38:2
fits 287:13 294:1,18
298:10 412:17 413:7
five 151:5 217:12
219:12 233:20 286:18
301:11 324:12 327:9
347:6 362:4,10
fix 201:1 218:9 228:2
239:3,6 305:20
306:15 389:14,21,22
415:18,18
fixed 228:9 241:3 401:5
fixes 200:7 201:9
fixing 240:6
fixings 306:4
flat 101:15
flawed 381:7
fleshed 239:20 288:15
flexibility 288:1
flexible 89:5 185:22
186:3
flicker 56:17
flip 76:17 273:20
floating 201:8
Flook 23:5,11 59:13
66:3 67:20 68:20
375:17 376:1 379:14
384:11 396:10 414:16
floor 68:22 292:21
295:18 409:3
flounder 407:20
flourish 142:10
flow 43:16 301:21,22
341:5,6 342:11
349:14,16
fluctuate 173:5
fluffy 341:2
flunk-out 327:21
flying 46:5 365:22
focus 34:22 85:8 107:6
114:16 116:10 144:9
149:13 157:3 171:15
189:5 219:2 254:19
312:21 357:13 367:9
380:3 394:1
focused 6:13 72:5
87:16 92:12 120:16
126:2,10 148:3 175:3
214:17 218:8 229:5
271:16 311:16 316:8
317:6 367:11 425:11
focuses 10:6 95:9
146:16 211:11 332:13
focusing 94:3 96:9
126:15 252:6,19
277:18 313:21 377:2
378:4 409:18
fold 132:11
folks 70:17 169:10
244:5 302:12 350:9
350:20 351:11
follow 23:4,13 28:8

38:4 59:3 69:7 110:6
121:1 148:5 230:2
345:13 346:20 347:3
347:10 354:20
follow-on 237:10
follow-up 227:14
237:16 241:16
follow-ups 183:4
followed 7:6 159:1
216:3 250:10 292:4
following 13:1 24:16
98:22 104:14 135:5
158:6 215:1 249:2
292:8 326:8 366:18
382:3,4 418:7
follows 43:16
food 429:4
Foods 246:3
foolishness 366:11
foot 128:15
footprint 327:16
forbidden 40:4
Force 163:9,12 186:11
forced 27:7 128:9
forces 280:22
forefront 136:3
forego 218:20
foreign 139:11,11,12,16
139:17,20 217:18,19
254:3
forge 124:3
forget 80:3 116:13
127:1 181:18
forgive 21:16
form 100:16 238:16
251:19 291:12 341:5
342:9
formal 327:18
formalistically 214:13
format 127:22
former 158:4 405:13
forms 55:18
formula 23:9 147:8
331:21
formulas 23:5
formulation 31:1
forth 33:2 70:15 145:16
159:11 160:6 203:11
203:20 205:1 220:6,8
396:4 397:20
fortunate 349:1
fortunately 132:21
fortune 327:2
forum 6:11 197:4
200:22 214:21 248:1
326:16 404:19
forum-shopping
175:22 187:17,22

forward 8:19 9:5 17:2
38:1,18 44:2 64:21
126:6 144:16 145:7
164:2,3 214:7 218:4
226:2 240:7 241:21
249:1 327:6 334:2
338:2 364:17 374:22
385:11 387:8 407:3
413:5 420:1 424:7
forwarded 148:11
foster 6:20 371:5
found 14:12 40:9 65:16
65:20 85:7 108:13,21
119:19 151:5 172:14
210:8 253:19 300:21
312:3 322:16 401:21
406:10 425:21
foundation 2:17 255:12
266:15 396:16
founder 321:21 328:3
founders 269:8 273:7
four 10:20 18:16 82:17
83:8,22 117:10 165:5
245:16 246:11 293:4
325:20 329:9 409:4
fourth 216:16 337:1
359:19 360:1 372:16
framed 394:8
framework 53:9,13,15
53:18 54:16,19 55:9
55:13,19 73:11,15
91:19 99:17 136:13
138:11 149:10 171:20
174:12 175:8,11
182:18 205:1 210:15
210:22 230:14,22
231:6 239:19,22
240:2 332:9
frameworks 185:18
Frank 2:1,13 4:5,19
21:8 29:12,14 46:12
191:2,4
frankly 156:22 199:20
201:18 219:13 220:15
262:8 266:11 284:5
297:17 314:15 357:13
411:6 419:7
free 70:20 191:15
217:21 256:17 258:10
285:1,5,10,11 287:1
295:20 392:22 394:10
freedom 200:5 285:15
freedoms 330:16
freer 315:17
French 336:21
frequently 53:21 243:2
312:1
friend 311:10

friends 225:17 356:19
front 21:13 77:4 167:14
269:14 334:22 361:12
Frontier 2:17 255:11
fronts 187:7
fruit 55:16,17,18
frustration 44:20
377:11
Fu 151:6
fuel 391:15
fueling 43:12 195:13
fuels 195:11
full 9:11 20:6 71:4
103:3 181:6 184:19
200:5 231:14 264:20
319:11 341:18 391:7
429:1
fully 100:5 102:5 255:3
371:22
fun 74:4
function 7:17 52:4
108:16 138:22 180:5
243:7 264:1,4 265:9
functional 46:19 51:22
52:3 180:7 363:16,17
functionality 33:18 34:5
115:13 146:13
functionally 36:1 77:6
101:15
functioning 37:7
147:17 206:20 224:20
functions 250:19
fund 71:10 258:2,12
fundamental 22:22
23:16,18 24:6 25:6
194:9,15 215:5 225:9
421:2
funded 139:16
funding 69:6 70:10
262:13 314:18 324:8
324:13 399:2 424:22
425:13
funds 328:7
funny 336:3
Furious 151:5
furnace 384:1,6,6
further 15:19 76:17
91:9 102:2 117:15
140:3,4,6 188:20
189:10 351:16 372:22
furthering 86:21
future 50:4 88:20 116:1
122:19 130:3 141:17
195:19 232:21 233:2
316:12
fuzzy 208:22

G

G- 281:8
gait 38:2
gallery 260:2
galvanic 395:6
game 149:3 274:14
419:8,8
games 74:12 416:22
418:11,16,19 420:20
421:7
gaming 318:19 416:22
418:18
GAO 43:7
gaps 215:7
Gardner 2:16 5:1 245:3
245:4 247:20 279:4
282:6 283:22 296:2,5
303:1 304:2,5 306:14
garner 42:3
gate-keeping 138:22
Gates 426:8
gather 170:7
gathered 206:4
GDP 311:3
gear 398:13
gears 414:12
gee 129:16 156:16
geek 327:17
gene 14:7 111:2 317:15
317:15 415:21
general 32:10,13 33:9
35:6 58:22 104:17
126:13 142:1 148:5
160:17 203:12 206:21
211:3 228:6 248:6
249:5 261:8 274:2
296:9 397:2 426:18
generally 16:6 78:6
82:18 84:3 98:22 99:6
107:12 130:22 173:14
266:9 290:3 306:11
354:14,18 426:11
428:1
generate 12:11 193:1
336:17 366:6 403:16
generated 324:18
generation 352:6
413:15
generic 15:5 25:7 32:8
32:9 166:10 251:21
406:6
generis 242:8
genes 14:13 105:9
213:9 237:21 238:6
genetic 105:12 213:9
Genetics 2:14
gentleman 286:7
geopolitical 136:18
139:2

- Georgia** 296:17
Germany 73:13 354:2
germline 240:11,12
getting 48:2 79:9,11
87:12 111:12 144:13
164:19 183:1 200:20
202:8 223:17 271:9
276:20 283:1 286:8
296:18 298:12 301:5
303:7 305:3,5 309:17
310:12,18,20,21
324:22 346:20 350:17
354:9 357:6 358:6
378:21
giant 305:5 366:12
Giblin 2:20 5:7 326:20
326:21 343:15 348:19
348:22 364:10
GIPC 193:12
give 7:12 9:2 33:3 50:3
80:5 107:11 111:14
112:7 127:10,20
147:13 153:22 169:5
204:10 218:16 221:17
237:8,16 245:11
290:16 295:22 316:18
329:13 344:14 385:22
420:18
given 13:8 26:7 41:21
60:22 77:19 106:7
124:1 125:4 148:2
167:7 173:3 200:5
211:15 248:21 264:22
319:4 379:1 398:4
415:5,19
gives 145:5 169:4
220:19 278:1 292:10
419:20
giveth 108:4
giving 286:10,21
glad 120:12
glance 147:11
global 9:13 26:18 148:7
191:5 192:3,11
193:14 230:15 254:10
globally 299:17
globe 192:20
gloss 33:22
goal 48:4 50:11 95:8
117:15 170:16 250:12
418:3
God 333:10
gold 48:7
goldmine 335:3
Goliath 330:6
good-paying 193:3
Google 2:17 247:20
248:6,9,13 249:12
253:19 264:9 275:8,9
285:20 345:20
gotten 143:18 144:1
344:12 378:7 411:1
governing 407:13
government 150:6
214:20 348:12 402:6
Government's 214:15
214:16
governments 139:13
139:17
GPD 193:1
grade 340:16
grammatical 339:2
grant 111:8 114:9,13
124:12 131:8 195:4
granted 41:22 43:21
74:17 124:13 130:18
292:18 383:17 393:2
granting 125:7
grants 168:14
granularly 320:1
grapes 55:17
graphics 165:8,16
166:20
grasp 353:2
grateful 163:21 191:21
245:11
gratified 406:12
gravitating 55:22
gray 32:4 124:4 125:7,9
125:14 126:18 128:2
329:7
grayer 125:9
greater 78:2 139:10
169:5 371:5 413:1
greatest 61:2 159:5
greatly 97:13
greed 331:21 334:4
Greek 393:18
Greeks 152:6
green 19:10
greet 77:18
greeted 40:21
grew 403:18
grist 111:15
ground 48:19 122:8
422:4 423:19,20,20
groundbreaking
162:22 248:9 407:12
grounds 101:10 111:17
160:3 310:21,22
374:9
group 2:9 153:15
186:18 223:14 268:8
317:11,14,21 318:21
320:10 370:15
grouped 42:8
groups 318:18
grow 130:10 408:5
growing 192:6 294:15
320:15
growingly 150:10
grown 320:16,21
growth 142:13 191:18
192:10 218:3 266:17
266:22 267:10,14
411:17
guarantee 331:2
guaranteed 167:15
Guard 177:12
guess 57:14 58:16
60:14 69:11 75:14
76:9 149:9 164:21
169:5 186:16 221:13
234:19 274:21 343:10
349:9
guidance 6:15 50:15
90:20 197:7 198:12
200:13 211:12 260:11
261:1,14 291:18
292:3 346:16,21
guide 89:7 110:3
170:19 215:16
guided 217:3
guideline 57:7 349:10
guidelines 50:11 58:18
59:1,15,22 61:7,17
63:19 87:11 130:5
147:4 157:16 161:17
185:20 322:7,17,19
323:1 325:12,17,20
342:14 344:9 345:4
347:4,7 348:9 349:7
378:4
guideposts 230:18
guiding 9:22
-
- H**
-
- H** 2:10 4:15
hair 32:3
half 15:8 19:1,17 25:11
26:1 27:5 28:20,20
58:10 167:17 252:10
267:5 293:4 295:14
320:2 325:21 336:16
342:18 344:14,16
Hall 1:11
hallmark 407:4
hallowed 37:21
hampering 309:21
hand 47:22 69:22 76:21
106:4 264:18 279:14
338:1,9 339:16 345:4
392:14 418:13
handed 165:4
handful 12:9
handily 258:4
handle 18:11 74:20
279:3
handling 398:10
hands 107:3
hang 269:20
Hannon 1:19 142:21
182:15 230:11 287:5
295:17 307:5 312:11
321:18 326:19 335:19
343:9 348:18,21
349:22 357:14 361:16
366:13
Hans 2:15 4:21 210:19
424:10
Hansen 108:20 109:2
happen 18:10 257:22
281:7 320:2 402:12
happened 45:6 144:5
144:13 319:22 341:16
342:5 359:4 379:14
379:14 399:8
happening 18:8 70:15
71:1,4 74:14 95:13
128:7 246:22 315:1
316:15 350:12,22
352:10,11 354:1,4
379:11 387:3
happens 154:16
happiness 404:22
happy 18:12 111:11
125:19 135:13 170:10
270:14,19 380:9
harbor 370:13 373:1
hard 40:20 50:18 53:15
58:12 59:4,13 61:15
75:11,13 105:16
194:22 239:2,9
251:14 260:13 264:13
296:22 305:4 314:10
318:17 325:13 326:11
404:10 415:21
harder 125:11 295:9
hardware 32:8,8,20
33:6,15 35:14 46:11
51:3 68:9,11 143:8
166:8 335:3
hardwired 32:6
harm 419:6
harmed 378:18
harmful 257:12
harmonization 73:20
harmonized 206:18
harmonizes 151:8
harmony 207:15 371:5
harshest 141:4
Hastings 2:2 37:17

Hat 258:9
hate 71:19
hateful 155:8
head 32:3 75:12,14
 79:2 191:6 232:18
 278:14 343:5 348:14
 406:20
headed 379:5
headline 40:17
headquartered 135:16
headquarters 80:4
 367:1
health 107:18 404:22
 421:5
health-saving 207:3
healthcare 206:22
 231:7 313:17 354:13
 404:8 405:6
healthy 142:5 154:11
 158:2 178:21 401:6
heap 336:8
hear 8:4 10:10 20:16,18
 20:21 22:6,7,8 44:9
 44:20 52:14,16 70:8
 81:17 135:9 206:2
 210:19 222:6 227:16
 227:16 228:16,20
 232:3 256:3 266:2
 276:4,4 314:15
 332:20 350:18 362:16
 367:4 386:17
heard 20:16 113:10
 120:8 124:10 156:5
 211:16 214:1 220:17
 224:12,18 235:4,6,14
 236:11 237:12 243:1
 268:5 270:16 275:2,5
 275:13 288:16 300:3
 300:7 318:19 346:15
 352:1,7 382:12 406:8
 408:20 409:6 410:15
 418:9 419:16 420:17
hearing 255:19 261:22
 275:4 290:4 349:11
heart 421:19
heating 388:12
heavily 72:5 139:3
 249:12 351:3 414:1
hedging 12:20 23:8,14
 23:18
held 6:11 12:17 13:7
 14:6 40:13 49:22 50:1
 86:18 140:5 283:13
 332:19 362:18
Hellman 339:19 340:1
 340:16
hello 21:21 95:21
 307:10

help 6:20 9:12,12 15:21
 27:12 58:7 63:22
 85:16 86:11,20 102:4
 128:12 130:5 147:2
 163:19 169:13 176:1
 191:17 193:8 197:7
 200:13 276:22 279:9
 313:16 315:10 329:13
 330:19 331:5 332:8
 335:17 367:10 387:18
 391:15 399:20 402:18
 412:20 413:14
helped 192:17 276:9
 411:14 428:2
helpful 35:5 53:22 60:3
 60:4,15 80:1 116:7
 169:16 226:12 229:15
 234:11 260:21 273:16
 322:8 349:18 393:12
helping 92:1 200:14
 278:17 428:9
helps 57:1 164:14
 304:13
Herbert 429:12
hereditary 14:8
hesitance 343:18
hesitation 364:21
Hewlett-Packard
 166:19
hey 50:13 76:6
Hi 326:21
hidden 365:20
high 13:9 40:14 53:11
 54:10 67:1 84:16 89:1
 171:14 173:14 174:4
 175:17,18 176:2
 270:8 282:21 293:5
 312:4
high-tech 262:7
higher 72:13 193:4
 253:22 299:4 301:10
 311:12 377:17 380:20
 404:21
highlighted 359:16
 360:5 385:2,3
highly 171:13 230:20
 374:11
highly-developed
 163:1
hilarious 377:18 379:1
Hillel 155:7
hindered 224:21
hindsight 362:13
hint 145:5
hinted 174:15
hints 145:1
historical 380:16
historical 44:22 136:17

historically 70:11 212:9
 212:11 380:21 414:9
history 38:1,17 44:4,6
 68:8 151:16 155:6
 161:10 162:15 201:16
 294:12 381:2,8
 382:11 385:14,16
 386:1,10,11 387:9,11
 390:5,8 391:7 392:11
 397:18 399:20 424:3
 428:14
hit 157:3 305:3 319:22
hitting 69:3
hoc 90:18
hold 14:16 46:8 91:5
 105:8 139:20 322:22
 370:7 376:12 409:16
 409:17
holders 263:9
holding 40:16 86:15
 136:21 192:1 247:22
 348:13,15
holdings 101:19 258:8
holds 207:19
holdup 167:11
holes 91:4
holistic 401:5
Hollis 429:12
Holzer 2:7
home 20:2 151:3 341:4
 406:20
honestly 32:11 48:22
 107:15
honor 330:18 333:1
honored 326:22
hope 9:2 40:19 103:6
 122:8 207:7 214:18
 263:14 266:2 272:5
 374:20 381:3 412:12
hoped 41:3 262:18
 389:13
hopefully 149:10,12
 345:1
hopes 214:19
hoping 164:12 272:19
horizon 405:21
horizontal 396:3
hosting 142:15 150:1
 170:7 322:1
hot 384:1
hotter 384:6
hour 244:15
hours 331:20
housekeeping 7:1
hovered 42:4
huge 80:17 215:11
 366:7
hugely 254:11

Hulbert 103:2
human 108:10 118:1,21
 132:15,15 133:3
 147:7 204:20,20
 213:9 216:21 229:21
 237:1,4,21 238:6
 240:10,11,16 335:5
 366:2 369:20 377:22
 405:15 424:4
human-like 172:4
 173:13 175:5 177:4
humans 213:15 387:14
 405:19 406:5
humor 343:3
hunch 423:4
hundred 11:2,11 301:2
hundreds 58:15 206:5
 414:3,4
hurt 315:20 331:9
 413:13
hurting 413:17
hurts 70:2 323:7
hybrid 128:3
hypotheses 314:22

 I

I- 258:5
I-0 166:20
i.e 371:1
i4i 99:9
IBM 3:12 401:9,10
 404:16 405:3,13
 413:18
IBM's 403:15
idea 12:19 15:4,7 22:19
 23:10 27:19 29:20
 30:10,14 31:8 33:19
 33:22 34:4 35:3 37:3
 40:12,18 51:14 53:10
 53:14,17 54:15 55:11
 75:20 76:1,7,13,18
 77:11 80:11 89:10
 91:7,11 92:21 93:7
 94:18,20 97:7 107:13
 113:12,16,20 114:9
 114:19,22 115:10,12
 117:5 123:2 128:8,10
 129:3,9 130:15 133:1
 140:19 141:1 144:7
 145:11 150:19 151:12
 151:13,20,21,22
 152:1,6,17 153:17
 158:16 174:13,22
 204:9 205:1 207:12
 208:12 227:17 229:11
 231:21 252:17 273:13
 273:17 332:7 343:1
 346:8,9 353:2,12

362:20 364:1 376:10
 379:18 395:1 406:7
 421:11
ideas 11:15,16,19 23:6
 23:17 24:12 40:5
 99:18 125:9 127:18
 130:13 136:11,14
 138:8 139:15 141:13
 142:1 147:5 151:17
 174:2 194:10,19
 203:18 208:19 209:17
 275:21 288:19 334:7
 376:9 380:17 392:15
 392:19,22 398:4
 429:6
identification 318:15
identified 13:19 92:7
 186:13
identify 170:17 412:15
identifying 158:10
 174:13 374:21
IEG 100:2
ignore 154:5 379:16
ignored 138:2 175:9
 342:14
III 97:15 99:1
ilk 369:14
ill 390:19 415:3,6,16
illogic 80:10
illogical 25:10
ills 390:18
illuminating 262:3
illumination 429:2
illusion 38:11
illustrate 164:15 169:14
 391:20
illustrated 396:5
illustrates 428:5
llskey 293:12
imagine 40:20 239:9
 339:20 375:16
imagined 129:21
immediate 90:16 130:6
 136:4
immediately 34:11 76:8
immunosuppressive
 212:16
impact 14:4 15:18 16:4
 80:21 88:11,16 96:16
 136:17 157:12 159:16
 164:1 193:20 194:1
 196:1,7 248:22
 298:14 303:3 310:16
 313:6 323:9 324:7
 375:12,20 381:19
impacted 12:10 15:14
 27:9 97:4 197:6 303:4
impacts 10:15 193:17

196:2
impediment 301:21
imperative 80:8 197:6
imperfect 423:5,5
implement 223:13,21
 224:2 247:2,5 374:5
implementable 117:18
implementation 15:6
 51:8 101:13 211:11
 214:12 221:20
implemented 29:16
 30:2 31:7 51:18
 137:17 142:1 283:7
 283:15,20 284:2
 286:12 298:19 375:19
 406:4
implementing 103:9
 249:19 368:16 373:18
implicated 115:19
implications 119:7
 164:15 212:3 323:17
implicit 140:5 368:15
 368:21 369:18 370:19
 372:3 374:4 422:19
implied 372:12
import 150:3
importance 63:17 81:1
 125:5 212:9 230:13
 313:4,9
important 9:7 16:21
 26:16 31:1,22 33:8
 35:6 63:4 70:10 72:11
 74:15 136:16 142:5,7
 142:9,16 150:1 155:1
 155:2 160:17 182:10
 187:22 189:18 192:1
 192:4 193:16 196:17
 197:2,14 200:16,22
 207:1 224:5 225:3
 243:11 244:1,9 246:7
 248:2 249:20 251:8
 256:13 258:21 287:2
 291:16 300:4 313:3,7
 314:12,19 326:17
 327:5 328:18,20
 330:2,20 334:14
 335:6 340:3 349:18
 350:9 353:10 368:20
 378:11 384:2,8 386:2
 386:5 388:2,20
 389:17,17 393:7
 401:10 408:12 421:6
 428:8
importantly 280:13
importation 415:7
imported 415:8
imports 399:21
impose 48:5 370:7

imposing 368:1
imposition 256:21
impossible 171:10
 173:4 264:7,10
 402:11
impressive 322:8
improper 29:2
improve 6:14 36:8,12
 37:1 46:22 63:13
 216:13 265:13 401:12
 401:15
improved 26:22 61:17
 146:14 298:1
improvement 25:1 28:6
 33:17 34:4 35:1,10,11
 47:5,7 49:15 89:19
 92:17 93:16 114:6,11
 115:12 116:21 117:6
 130:17 146:3,12
 173:21 178:11 208:10
 257:7 393:5 415:14
improvements 27:22
 27:22 33:5,6,14 89:13
 89:21 92:13 121:7,15
 147:16,17 362:8
improves 37:6 146:13
improving 26:9 46:20
 66:8 170:20 286:13
in-depth 176:12,15
in-house 96:3 165:5
inaccurate 258:18
incentive 195:11
incentives 158:3
 162:22 207:1 265:9
 270:2 354:19 403:11
incentivize 29:1 160:11
 242:12 263:22 267:10
 267:12,14,21 278:19
 286:5
incentivized 267:5
 285:14
inclined 381:1
include 57:11 93:10
 147:7,16 205:2
 212:14 250:3 261:1
 301:7 326:3 369:19
included 60:1 171:1
includes 51:3 93:20
 192:12 337:20 363:9
including 8:15 10:1
 28:19 72:21 81:20
 99:4 100:10 102:11
 161:8 163:18 176:10
 276:2 313:12 369:5
 400:16 403:7
inconsistencies 185:16
inconsistency 157:17
inconsistent 58:12

67:22 107:6 161:14
 206:14 231:6 406:22
incorporate 323:2
 325:16
incorporating 347:8
increase 98:2 102:2
 137:5 163:19 274:9
 320:11 331:8 358:6
increased 26:10 137:12
 143:18 320:18
increases 172:12 298:1
increasing 97:1 100:13
 139:21 351:13
increasingly 26:15 70:9
 219:16 244:1,9
incredibly 268:7,18,21
 268:21 278:12 302:8
 395:21
incubator 162:21
indefiniteness 395:19
indemnification 305:2
indemnify 305:6
independent 28:18,21
 104:14 154:17 242:7
 242:15 343:11 357:20
independently 287:2
index 192:12
India 287:21
indicate 24:8
indication 24:19
indicator 192:15 317:17
indirect 174:3 177:9,12
indirectly 404:4
individual 96:6,14
 192:13 194:5 205:15
 350:15
individual's 354:16
individually 377:10
individuals 199:8
 324:17
industrial 162:14 212:4
 212:16 213:1 330:9
 371:14 384:3 398:20
 414:5
industrialized 209:7
 215:12
industries 42:21 192:7
 192:22 193:3 196:2
 196:13 197:1 228:22
 231:22 233:12 293:19
 294:19 308:17,18
 312:3,5 380:22 404:1
 404:7 412:20 420:16
industry 43:11 53:11
 54:10 72:12 74:9
 131:4 146:5 191:13
 193:15 194:5 196:1
 199:8 205:20 206:3,5

206:7,7,8,18 223:7
 224:7 242:9 243:13
 247:8 249:10 253:4
 257:21 271:19 294:16
 309:16 311:14 312:4
 313:7 356:19 357:12
 359:8,11 367:12
 405:5
inefficiency 158:1
inefficient 116:16
ineligibility 34:17
 159:18 162:1,4
 172:13 203:13
ineligible 13:10 24:12
 31:12,17 60:21 65:21
 91:5,14 117:4 138:16
 138:18 203:6 228:19
 252:7 277:13 406:7
 409:18
inevitable 402:3,8
influence 150:5
influencing 329:17
inform 34:5
information 16:1 21:4
 24:9 26:15 85:2 105:9
 193:19 195:14,16,20
 196:15 222:1 242:16
 253:7 254:6 316:21
 348:1 356:8 363:14
 386:3 391:8 403:15
 403:22
informative 230:21
informed 424:13
infringement 216:8
 267:13 274:16 276:14
infringers 400:19
infringes 48:8
infringing 247:11
ingenuity 108:10
 132:16
inherent 186:2
inherently 132:18 133:2
inhibiting 26:8,18
initial 132:1 252:5
 376:17 415:8
Initiative 314:18
initiatives 96:12 313:12
inject 384:5
innovate 158:3 192:8
 242:15
innovating 354:1
innovations 137:16
 141:18,22 172:20
 230:10 236:9 248:9
 249:14 309:14 398:11
 407:15
innovative 11:9 144:10
 184:4 192:19 197:11

212:4 262:21 360:1
 403:14 407:14
innovator 354:8
innovators 12:3 194:6
 243:10 251:14 263:1
 263:11 315:10 405:7
input 10:11 16:20 58:16
 60:14 102:7 197:5
inquiry 31:3 32:16
 34:21
insensitive 196:3
inside 329:7,15 333:4
 333:13,22 335:9
 344:13 349:21
insight 287:15
insightful 116:8
insistence 68:3
instance 34:3 46:5
 125:12 167:2 268:8
 268:17 418:12
instances 270:2
instinct 50:3,5 393:14
 394:18
Institute 107:18
instituted 101:9
institution 101:14
 428:9
institutionally 428:6
instruct 255:2
instructions 100:2
 135:5 189:7
instructive 393:8 395:4
 395:22
instrument 160:1,18
insufficient 119:4
insurmountable 161:19
integrate 8:19 66:7
integrated 99:18
Intel 2:11 164:9 165:6
 166:13 172:17 259:6
intel's 365:16
intellectual 1:17 7:21
 26:13 27:1,7 90:15
 157:10 189:5 191:6,7
 191:17 192:11 206:19
 394:7 420:5
intellectually 45:9
 47:16 48:15 196:19
 295:9
intelligence 327:10
 328:4 335:5 404:18
 405:16
intelligible 395:8
intend 46:8 104:1,7
 367:13
intended 36:20 122:16
 130:9 172:22 264:5
 397:15 400:3

intends 111:18
intense 428:22
intensely 70:21
intent 20:5 207:21
 333:20,21
intention 239:21 279:11
 279:12
inter-parties 125:1
interact 7:7 263:18
 272:20
interacting 67:3 269:11
interaction 269:7
interchange 41:14
interest 18:13 20:13
 192:6
interested 90:6 113:7
 122:13 152:18 197:14
interesting 45:6 56:10
 61:21 65:13 68:7 90:5
 112:20 115:15 119:9
 209:3 220:16,21
 270:19 285:17 362:16
 393:16 423:12
interests 62:6 139:20
 139:20 191:11
interfere 237:9
interim 43:21 168:11
intermediated 15:5
 23:15
internal 41:16
internally 298:15
 363:20 427:1
international 1:12,15
 1:15 17:15 26:19 56:7
 56:10 69:9,11 72:19
 73:11 78:10 80:22
 142:22 158:18 230:15
 230:17 292:5 293:15
 353:7
internationally 78:13
 212:2 215:16 355:12
internet 26:6 80:22
 137:6 148:7,9 233:15
 250:20
interplay 122:16,16
interpret 104:21 110:7
 202:15 308:4,4
interpretation 106:19
 159:20 214:14 308:1
 329:8
interpreted 146:1
 238:15
interpreting 55:21
 103:8 308:3
interrogate 182:7
interrogations 182:13
interruption 137:9
intervene 41:3

intervention 369:20
interview 28:19 349:4
interviews 352:8
intimates 99:12
intractable 311:1
intrigued 272:13
introduce 7:20 17:11
 18:7 376:4
introduced 13:13 24:16
 68:8 171:20 244:20
 417:14
Introductions 4:2
inure 139:7,11
invalid 12:18 48:10
 160:3
invalidate 104:18
invalidated 40:2 56:4
 98:14 156:7,10 167:9
 257:20 267:16 305:11
 379:22 406:16
invalidating 15:11
 249:16 280:12
invalidation 97:2
invalidity 83:8 138:4
 171:21 172:9 213:6
 222:5
invent 192:8 224:1
 279:11 280:3,7
 281:19 331:18 363:13
invented 155:11 179:9
 181:11,22 240:4
 281:21 333:1 334:12
 393:3 395:13
inventing 281:12
 334:18 362:20
invention 15:7 30:3
 31:7 51:2 53:20,21
 54:1,15 65:1,3,4,5
 77:10 93:11,13 94:6
 106:19 108:9 114:11
 117:2 126:12 155:3
 155:14,15 156:9
 180:18 182:14 183:20
 184:12 188:5 195:1,7
 195:8 199:19 208:11
 210:8 216:9 231:9
 236:19 252:1 253:21
 254:5 264:18 267:18
 283:20 284:2 332:4
 343:1 344:22 363:2
 373:2 397:7,9 399:15
 402:19 406:4
inventions 15:12,19
 29:16 49:12 95:9
 154:20 158:11 162:11
 162:16 195:22 198:18
 206:12,22 208:21
 210:16 231:12,15

235:22 236:7,8,14
 247:7 273:13 281:20
 282:1,5 284:10
 286:13 288:8 294:7
 298:19 304:9 330:16
 336:8 371:1,2,16
 372:14 376:8 377:2
 384:2 398:19 399:1
 400:2 405:22 406:18
 416:11
inventive 24:18 28:5
 150:21 154:20 155:2
 156:1 160:21 162:13
 174:15 176:6 212:7
 388:3,7,11
inventiveness 120:17
inventor 151:16 279:16
 322:11 327:8 328:14
 331:1,13 357:22
inventor's 363:18
inventors 27:5,13 53:4
 53:11 139:7,11 194:5
 197:1 246:10 256:20
 280:7 288:17 323:15
 330:2,7,19,22 331:19
 332:6,19 337:14
 343:11 352:17 392:21
inventory 24:4
invents 41:7 42:19
 208:9
invest 98:11 249:12
 270:8 425:14
invested 258:1,15
 303:11
Investigate 177:15
investing 297:18 301:1
 323:6 343:19 425:12
investment 16:5 27:8
 56:18 72:17 153:21
 207:2 224:8 231:16
 231:16 233:13 234:6
 248:11 250:15 270:4
 301:9,22 302:20
 403:12 404:12
investments 57:2 213:7
 309:18 354:9 405:3
 405:11 408:5 413:18
investor 328:10
investors 139:8 247:14
 270:4,5 297:13,14,15
 302:3 303:10 311:22
 357:20
invigorated 181:15
invitation 112:19
 368:22
invite 190:21
invited 272:15
inviting 102:7,22 195:4

307:12 312:15
invoked 35:4
involve 31:13 162:13
 213:11 267:17
involved 67:1 161:10
 163:13 194:15 296:6
 296:15,18 327:9
 362:20 363:1 377:19
 384:3 414:1
involvement 9:11 215:2
 226:7
involves 31:16,19
involving 31:18 384:1
IP 3:8 96:3 192:3,7,9,12
 192:16,16 193:7
 196:11,21 211:3
 245:22 247:15,18
 302:4 307:14 344:1
 352:8 358:1 413:22
 426:21 427:3,4
IP-intensive 192:22
IP5 163:6
IPLA 307:17,21
IPLA's 307:19
IPR 125:16
irrelevant 399:14
irresponsible 402:10
irresponsibly 402:1
Irving 405:12
isolated 14:7 97:8
 105:11 132:8 218:16
 218:21
isolating 132:7
isolation 14:15
isomorphic 344:20
Israel 2:10 4:16 157:7,8
 157:9 182:16,21
 186:6,10 311:8
issuance 98:12 137:5
 141:12
issue 6:17,22 23:10,17
 30:20 56:9 61:9 77:21
 78:12 82:4 84:1 88:10
 104:9 141:21 145:9
 148:8 158:7 180:14
 184:3 186:10 187:17
 192:5 194:15 197:6
 197:15 210:10 225:5
 226:3,5 238:5 269:22
 279:20 287:9 309:8
 309:22 326:17 330:8
 336:16 356:20 357:5
 357:18 358:7,11
 381:4 389:7 390:16
 391:3 400:22 408:7
 411:12 412:5 415:22
issued 46:17 99:22
 131:13,17 219:11,17

228:4,7 250:18
 264:22 276:11 281:14
 315:11 327:3 333:7
 358:10,13 359:20
 360:12 365:12
issues 21:7 30:11 35:14
 43:20 82:5,13 125:11
 125:16 135:20 140:4
 142:17 157:20 159:5
 160:17 163:13 164:3
 202:7 226:4,20 253:9
 286:18,18 318:14
 349:10 383:6 420:14
 421:5,6 427:9
issuing 25:12 124:17
 128:6 245:18 310:13
 323:10,13 325:16
 347:7
iterations 198:12

J

J.C 2:11 135:16 137:21
 138:3 140:2,13 141:5
 142:4 224:19
Jackson 2:14 4:20
 197:19,20 205:5
 219:5 220:4 223:4
 233:9 239:13 243:8
Jake 102:11
James 2:8 4:12 112:15
January 20:20 81:9
Japan 73:13 163:2
 206:9 209:19
Japanese 210:7
Jason 2:16 5:1 245:3
 284:22 288:7 300:4
Jason's 302:2
Jeff 389:20
Jeffrey 2:10 4:15
 149:19 178:1
Jennifer 2:21 5:6 307:9
 307:13
Jewish 155:7
Jill 55:16
job 36:20 58:22 60:8
 149:7 191:18 192:10
 198:17 200:14 218:2
 226:15,16 266:17,22
 267:10 269:1 272:2
 304:19 331:20 346:20
 405:10
jobs 9:21 27:3 193:3,21
 324:18 404:2,5
John 1:18 18:1
joined 38:13 142:20
joining 6:5,6,7 134:22
 135:14 245:6
joint 98:1 268:9

joke 343:7
Jones 3:9 5:15 375:3,4
 409:8 426:10
Josh 383:2,4
joys 37:18
judge 27:16 90:4 168:5
 168:12 194:22 195:6
 200:2 257:19 261:5,6
 291:7 397:12,13
 406:3 411:8
judges 58:7 83:10,15
 98:19,22 99:6 202:14
 204:11 239:15 336:16
 406:13,17 407:5
judgment 98:18 168:8
 168:14 259:20
judgments 105:1
judicial 12:19 13:11,18
 13:19,22 16:9,14
 103:15 122:17,19
 123:1 128:22 133:15
 138:15 140:5 145:10
 159:14 200:8 201:17
 202:12 203:18 204:4
 234:16 235:2 238:13
 238:19 399:10 407:11
 409:1
judicially 11:17 160:8
 199:18 203:18 368:1
judiciary 11:12 41:14
 43:17 100:8 158:6
Julie 2:18 5:3 7:13
 261:19 275:5 297:14
 300:1 303:14 306:2
 413:16 425:1
jump 44:2 76:8 223:4
 319:3
jumping 338:2
junction 381:1
jungle 108:22
jurisdiction 210:10
jurisdictions 206:14
 207:14 209:5,13,21
 254:14 287:21 289:6
 299:8
jurisprudence 10:7
 15:22 16:2 45:8,21
 46:6 99:4 150:12,18
 156:12 157:12 159:3
 160:13 162:7 163:22
 193:12,18 207:11
 227:21 291:11 293:20
 367:21 368:13 369:18
 381:9 385:13 390:13
 399:10,21 407:5
 415:4 421:22 422:3
 427:18,22 428:4
jury 47:22 167:15

Justice 67:21 103:22
104:12 105:7 108:20
125:18 154:12 207:9
207:19 214:13 373:8
388:1 390:12 411:4
422:21 423:18
Justices 39:13 127:14
343:4
justification 368:1
justified 323:11
justify 373:15 374:12
406:18,21

K

K 1:16 4:3
Kagan 125:18
Kahn 184:18
Kappos 371:4
Katherine 301:4
Kaufman 266:15
keep 9:4 78:7 127:19
137:8 143:14 185:6
227:3 246:22,22
336:13 358:14 360:11
375:7
keeping 8:11 24:5,11
118:15 133:16 170:20
177:1
keeps 247:18
Kelley 1:20 17:2,6
21:12,22 22:6,11,15
29:4,10 37:10 44:8
52:13 57:17 64:13
66:18 67:8 71:7 73:22
75:2 80:2 81:2,7,18
90:9 95:18 102:14
112:11 120:5 122:10
123:20 133:7,12
134:5,12
KELLY 134:21 135:8
180:4 224:9 227:13
238:7 241:15
Ken 7:13
kettle 410:21
Kevin 2:7 4:11 102:18
103:1
key 97:5 174:5 188:7
338:12 339:19 342:19
405:14 415:3,16
keyword 176:3
kick 408:15
kicker 383:18
kill 413:12
Kim 2:11,22,22 4:16 5:8
164:7,9 335:20 342:4
kin 236:16
kinds 34:12 251:2,9
259:13,22 267:20

318:14
kit 223:7 315:18 317:8
knell 406:14
knew 349:5
knowing 189:9 277:5
knowledge 122:5
123:16 153:22 154:16
178:22 179:5,10
216:20 237:5,9
286:10 392:14 393:20
394:13 411:22
known 24:9 93:21
384:20 385:10 388:13
388:14,22 389:9
393:6
knows 304:8 327:15
341:8 409:12
Konstantin 2:14 4:20
205:6,10 237:12
Korea 352:22
KPMG 312:2
Krause 1:21 244:19,21
247:19 255:10 261:18
272:4 274:12,18,20
275:16 278:6 281:22
283:16 284:17 287:4
295:1 300:1,13
302:22 305:15 306:7
306:18,21 350:1
418:7 419:2,9 423:8
424:20 426:2,7
KSR 184:18 360:11,11
360:19 427:12,19
Kuhn 2:21 5:6 307:9,10
307:13 312:12 346:13
346:13 357:15,18
Kung 151:6

L

label 334:19
laboratories 387:4
Labs 153:16
lack 99:2,11,12 128:21
137:6 324:8 344:6
349:14 354:6 356:16
395:19
lacking 266:9
lag 41:21 319:10
lagging 318:13
laid 149:5
land 180:11
landing 175:18
landmark 136:19
landscape 57:15 136:1
138:12 171:12 176:22
199:7
language 10:17 31:12
61:18 86:11 92:14,16
121:11,15,17 122:22
123:12 140:6,16
158:10 159:10 161:9
195:3 198:5 200:1
202:14,17 203:9
204:8 226:8 235:2
239:18 240:3 260:15
282:20 283:17 297:6
308:20 327:11 371:11
385:3 387:2,7,21
409:19 410:5 416:5
large 44:1 55:8 56:13
83:1 91:4 205:16
213:6 251:4 258:6
264:8 283:11 287:18
293:19 325:3,8
340:13 362:16 420:15
426:12,16
largely 10:18 11:1,8
98:21 101:17 138:2
141:11 224:14 249:17
249:21 308:1 311:21
382:13
larger 16:18 90:21
234:5 265:2 298:5
305:1 340:17
largest 26:13 100:17
191:10
late 307:11
latest 39:20
Latin 336:21
laughable 23:2
Laughter 275:15 336:4
launched 42:8 313:12
laundry 222:8,15,16
laws 11:19 129:15
136:7 139:15 194:10
204:6 206:19 207:13
207:15 208:18 209:4
209:7 230:2 289:18
305:22 373:9 374:14
394:9 407:17
laws' 216:18
lawsuit 48:5
lawsuits 42:16 137:10
137:22 311:19
lawyer's 331:20 343:20
lawyers 47:7 49:20 50:6
50:12 264:15 330:21
331:19 332:14
lay 167:14
layer 220:12
layers 180:16
lead 9:12 72:13 148:16
197:10 233:13 380:7
410:11
leader 192:17 196:22
356:3 405:13

leaders 104:19 105:2
leadership 193:14
leading 355:14 405:2
405:22
leads 227:14 309:15
386:16
lean 124:5
leap 80:10
leaps 405:8
learn 51:10 202:19
289:14,16 380:18
385:7
learned 238:9 338:1
learning 327:10 328:4
335:5
leave 39:12 43:18 157:1
234:17 336:22 343:3
343:8
leaves 41:9 265:3 311:4
leaving 252:7 286:22
led 217:7 238:19 324:10
Lee 1:16 2:4 4:3,7 7:22
8:3,6 57:20 77:8
135:17 142:14 171:5
192:1
Lee's 342:13
Lefson 389:20
left 12:9 17:13,16 18:8
19:11,13 96:10 130:2
140:8 141:21 174:15
215:9,9 305:17 319:5
319:20
legal 1:5 6:17 10:8
47:19 50:21,22 70:20
82:8 106:11 135:19
210:15,22 214:14
253:15 295:20 326:13
343:20 374:9
legal/technical 54:11
legalese 336:22
legislate 239:1,6
legislation 57:13
187:19 226:10 239:5
306:6,9,12 347:17
349:19 367:8 369:9
381:20 401:8
legislative 16:8 136:5
163:18 199:2 200:19
201:9 216:3 218:9
226:2 227:2 234:14
238:21 241:7 256:11
272:1 283:17 305:20
306:4,15 346:18
347:13 360:8,10
361:8 373:16 374:3
378:9 379:7 381:8
385:13 386:1,10
387:11 391:16 397:18

- 399:6,19 408:10,19
408:22 415:17
legislatively 186:22
215:15 226:5
legislators 391:9
legitimate 140:12
legitimately 177:8
Lemelson 196:6
Lemley 2:2 4:6 44:9,10
44:11,12 53:7 56:12
67:12,15 71:5,8 75:13
172:16 214:1
length 321:13
lengthy 27:8
lens 284:3 317:2
lessen 95:1
lessons 51:11
let's 76:12 87:1 127:1
148:6 154:5 182:9
183:16 203:18 204:9
204:10 219:2 240:18
274:20 299:17,18
308:9 309:18 319:2
339:11 341:17 374:16
374:16 382:1 385:11
387:20 392:1
Lettelleir 2:11 4:14
135:2,4,10
letter 27:18 303:8
letters 266:11 300:18
395:9 396:3
letting 169:18
level 13:9,10 30:12
40:14 41:20 51:16
67:2,2 75:21 84:17
89:1 91:20 113:17
123:17 132:20,20
185:7 189:16 220:14
233:11 376:15 428:14
leveled 89:12
leveling 320:11
levels 41:14 43:17
281:3 324:5
lever 382:16 398:13
leverage 363:19
leveraged 374:12
leveraging 260:6
283:10 303:20
liability 216:8
liberal 299:14
liberally 101:1
liberated 155:22
licensed 312:1
licensees 97:10
licenses 312:5 315:15
licensing 172:11
licensors 97:10
lie 210:15
lies 172:2 177:3 210:22
422:17
lieu 236:13
life 13:2 14:4 17:21
37:22 39:2 43:11 53:5
60:6 74:3,12 92:9
109:11 193:18 194:21
195:13,15 196:14
198:18 207:3 211:16
213:18,19 214:5
218:13 227:15 228:5
231:7 232:3 233:14
233:16,18 234:7,10
234:21 239:10 243:2
243:5 289:19 328:16
331:12 338:22 339:13
350:3 352:15,19
353:8 356:17
life-saving 192:18
207:3
lifespan 359:8,11
lifetime 331:14
lifting 151:2
light 19:10,15 24:3 28:4
82:12 116:8 267:4
likelihood 299:5
likes 55:16
limit 105:22 149:4
345:9 346:4 362:6
383:18
limitation 85:9 87:17
146:4 190:9 250:22
280:13 369:9 372:13
limitations 85:9 87:5
115:6 147:19 148:15
194:7 219:10,11,13
220:1 241:11 243:11
338:13 373:14
limited 76:3 114:13
118:16 178:5 179:2
179:15,18 194:11
337:13
limiting 116:11 369:2
370:22 374:7,13
424:17
limits 11:7 159:12
161:12
linchpin 14:1
Linda 429:13
line 11:21 70:6 133:3,5
133:22 141:14,15
146:7 156:20 208:22
242:19 253:11 267:18
285:21 321:1 348:13
361:12 375:13 380:1
388:20 399:7 403:3,4
410:15 411:9 414:18
Liner 338:21
lines 45:1 117:11 120:9
227:19 233:19 256:12
293:12 381:21 396:3
399:12 425:7
lingering 133:16
linguist 10:19
lining 70:17
link 192:9
Linn 194:22 195:6
Linnik 2:14 4:20 205:7
205:8,10 210:18
220:22 230:16,20
237:18 239:9 242:3
liqueur 222:17
liquidity 298:4
list 150:9 187:9 203:2,6
203:7 204:9 235:9,12
326:4
listed 131:17 205:20
listened 422:7
listening 354:22 362:14
lists 83:14 237:14
literally 58:14 132:5
195:8 208:4 240:4
246:4 248:10 269:9
269:17 282:13 376:19
litigants 97:10 158:1
213:16
litigate 227:6
litigated 99:21 311:20
litigating 100:17 157:20
litigation 44:15 47:20
92:4 96:20 121:9
123:15 124:14 128:13
137:11 143:7 150:4
162:2 164:12,14
167:6,17 169:9 171:7
182:12 229:4 251:7
262:16 268:3,7 312:7
312:7 347:15,16
402:20
litigations 152:13 251:3
litigator 29:15 333:22
litigators 27:10 50:7
little 20:8 22:3 29:20
30:5 32:3 33:2 36:3
38:15 42:5 62:11
69:17 74:6 75:6 106:1
122:15 127:8 128:15
142:19 143:6,11
145:1,4,17 151:20
165:4 201:13,21
204:7 219:5 232:14
234:7 240:18,18
243:19 251:12 253:6
263:14 270:17 271:2
276:7 292:8 299:10
301:15 302:9 319:13
319:18 320:5,12
329:14 337:18 340:21
344:2 390:9 417:16
425:3
live 257:5 293:22
389:22
lived 238:18
lives 195:8
living 256:2,15 391:19
LLP 2:1,3,14
Lo 2:17 5:2 247:20,21
248:5 255:10 275:12
275:17 287:17 290:13
290:16 298:13 306:11
loan 345:20
lobbyists 391:10
local 191:13
locally 296:16
location 135:14
locations 84:9,15
logic 332:3 338:20
long 39:19 43:18 48:12
79:22 90:5 101:5
120:15 126:5 129:19
162:15 191:16 203:17
216:4 221:4 238:9
261:13 294:11 316:6
348:8 356:12 387:4
409:8,22 412:3,22
428:22
longer 72:14 163:4
172:22 183:2 212:18
212:20 261:3,12
315:22 319:17 321:15
321:16 355:6 359:11
360:19 412:11
longstanding 383:10
looked 65:21 115:3
116:3 117:20 178:10
184:1 273:9 294:5
314:21 316:5,7,14
318:7 319:8 364:15
364:19 376:18 386:13
looking 26:22 34:11,19
35:9 49:9,21 51:1
59:7 61:17 76:8 77:9
79:21 119:21 121:6
121:10 127:21 132:2
186:12 188:11 259:14
260:12 281:9 300:2
313:20 314:5,9 316:4
316:6 317:2,12
350:13 352:4,21
353:6 358:13 359:11
413:5 416:9 417:11
looks 89:4 320:4
loom 338:20
loosest 288:18

lose 376:19
losers 315:8 402:22
losing 72:16 196:21
 411:18
lost 324:6 332:10
 355:20
lots 32:9 74:12 277:6
 332:14,14 427:6
loud 261:21
love 153:5 200:1 269:6
 270:9 327:17 328:16
 339:13
loves 341:6
low 13:9 67:2 91:3
 121:19 123:17 126:4
 174:4 175:16,20
 259:4 260:3 301:20
 309:20 311:12
lower 59:7 231:16
 252:8 259:18 354:7
 376:22
lowered 97:3
lowest 309:13
lucky 403:2
ludicrous 24:14
lunch 18:19 242:21
 244:15 344:18 350:2
luxury 274:6

M

M 2:14
machete 398:7
machine 10:21 12:14
 25:1 27:19 28:6 32:14
 35:8 36:4 38:20 93:15
 93:21 141:20 144:21
 222:17 327:10 328:4
 335:5 384:16 388:19
 389:2,6 393:5 414:17
machine-or-transfor...
 141:6,10,16
machines 26:8 223:12
 344:13 412:2
magic 190:14
magical 152:13
main 60:14 63:18
 137:17 386:14 428:10
maintain 196:11
maintaining 231:11
major 295:16 300:22
 330:8 381:17
majorities 67:20
majority 83:9 238:1
 262:8 267:8,16 278:8
 300:19 302:12 408:17
makers 133:20 223:10
 223:10,15,18
making 13:12 63:4

89:22 106:14 117:18
 123:22 171:9 172:8
 172:10 232:9 239:16
 308:16 313:22 322:19
 326:5 329:11 354:18
 371:8 391:14 395:18
 405:2 422:18 428:10
man 337:21 396:20
manage 83:1 150:4
management 74:12
 92:5 222:20 332:3
managers 25:15
managing 84:13 135:15
 164:9
mandate 230:1
mandated 107:4 250:12
mandates 109:20
mandatory 28:19
manifestation 237:1
manifestations 216:21
 229:21
manner 23:21 34:14
 123:4 146:6 160:14
 172:4 173:13 175:6
 177:5 187:3 395:11
manufacture 144:21
 236:3 393:4
manufacturer 10:22
 93:15,21
manufacturers 223:8
manufacturing 404:8
maps 392:16
Margeta 2:16
margin 425:13
marginal 120:17 121:2
margins 215:8
Marian 3:12 5:18 418:8
 418:10
Marion 400:5 419:13
Mark 2:2 4:6 44:9,12
 58:4 59:6 74:1,4
 79:10 195:18
markedly 14:11
market 42:13 217:21
 251:16 258:3 280:22
 305:3 316:7,17
 333:18 355:22 356:3
 425:15
marketing 395:8
marketplace 27:11
 224:21 230:15 244:12
 302:16 310:17 364:6
markets 41:22 42:7
 217:18
marks 117:5
Marqeta 245:7,12 247:3
 281:7
Mason 7:13

massive 86:2,9,10
mastectomy 356:6
MasterCard 245:21
mastermind 207:10
match 188:7
material 93:22 105:12
 317:3 321:5
materials 29:6 61:7
 213:3
mathematical 23:5,9
 147:8 209:9 340:2
mathematicians 282:12
mathematics 340:7
matthers 112:1 257:1
 328:19 329:1 330:17
 334:19 356:22 401:17
 407:9 427:5
Mattersight 2:21
 307:15 310:6 358:9
Mattersight's 307:19
mature 43:4 179:19
Mayer's 99:1
Mayo 13:3,16 14:1,21
 15:10 24:16 39:1 60:9
 62:1 91:17 104:1,4,6
 109:13 110:9 120:12
 120:13 121:1 135:21
 136:5,9 139:4 140:14
 154:12 159:19 182:18
 194:12 195:3,9 221:8
 313:21 317:1 321:2
 350:5 368:2 375:15
 375:16 379:15 382:1
 382:9,19 384:12
 385:7 387:20,21
 400:11
Mayo/Alice 381:6
MBHB 2:7 103:4
McClennen 2:14 205:11
McDonnell 103:2
McRO 40:16 92:4
 114:17 117:10,11,14
 117:20 120:3 121:8
 252:14 376:13
mean 36:12 50:16 59:9
 75:14,15 76:9 80:16
 119:8 120:18 124:5
 125:4,8 128:2 129:20
 132:17 140:15 143:20
 169:12 171:17 179:16
 180:15 219:22 231:16
 232:8 235:18 236:16
 240:9 250:14 271:12
 272:22 279:4,14
 280:8 287:17 296:5
 297:2,21 298:1 303:2
 303:15 304:6 328:12
 330:21 333:11 343:15

344:3 347:1,5 348:19
 352:10 356:18 360:22
 361:21 364:10,12,12
 365:9,16,17,22 366:2
 376:17 377:9 378:12
 378:14 382:2 387:7
 390:21 406:19 409:11
 419:6 420:16 426:13
 427:9,19
meander 407:20
meaning 22:18 89:9
 188:17 198:13 291:13
 338:17 394:1
meaningful 31:3 115:5
 115:7 117:13 168:2
 173:17 266:21,21
meaningless 338:19
meanings 89:8
means 19:11,12 61:11
 162:22 200:4 209:16
 231:10,12 286:16
 288:11 306:17 327:4
 344:4 374:10 406:22
 423:21
meant 104:4 181:12
 209:20 393:9,11,13
 393:19 417:18
measure 35:9,11 314:4
 314:10 319:7 371:3
measured 353:17
measurement 165:20
measures 280:17
mechanical 67:4
 344:13
mechanism 414:22
mechanisms 163:11
medicinal 213:1
medicine 198:11
 213:14 219:8 313:11
 314:18
Medicine's 204:17
medicines 207:3
 313:18
medium 266:5 404:6
 426:1
meet 101:5 142:2 304:5
 304:6 345:22
meeting 131:3 282:1
 358:12 429:15
member 222:13
members 7:10 104:20
 159:6 163:10 183:12
 192:4 193:12 211:21
 213:11 214:22 219:7
 222:7 225:15,17
 227:3 241:5 244:8
 255:22 256:2,3 257:2
 272:5 419:4

- members'** 194:14
243:22
membership 211:19
228:17 229:7 255:17
memories 166:9
memory 146:14
Menell 3:10 5:16 380:12
380:13 392:10 394:21
410:13 419:15 427:7
mental 204:5
mention 41:17 43:4
66:9 98:19 144:22
299:11 391:12 429:11
mentioned 10:4 65:14
82:6 94:10,13 108:18
115:4 130:12 171:4
182:16 185:5 202:20
208:1,3 225:3 282:15
287:6 297:15 299:10
300:1 303:14 317:1
322:21 379:11 402:13
418:8,10 424:21
menus 304:17
mere 15:5 209:17
251:20
merely 12:16 35:4 36:6
105:8 132:6 172:20
222:1 370:4 389:1,9
meritorious 195:2,7
206:12 406:17
merits 100:4 210:16
296:20
mess 187:14
met 161:21
metabolite 13:10
metaphor 402:14
metes 400:14
method 13:4,8 14:22
45:19 56:14,17 73:2
93:20 96:19 109:9
110:11 119:14 136:16
141:22 149:2 221:2
222:16 236:17 339:6
339:8 411:7 414:21
417:13
methods 57:11 80:15
130:1 137:2 209:9
213:12,12 249:18
340:22 342:20 350:4
377:4,22 384:19
416:21,22 420:4
metrics 192:13 310:5
314:6
Michelle 1:16 2:20 4:3
5:7 7:22 8:2 17:6
321:19,21 349:11
microbiomes 213:15
microphone 357:16
- Microsoft** 3:9 99:8
101:20 258:8 375:14
378:11 425:21 426:3
microwave 338:21
mid-1990s 334:13
middle 122:8 322:14
423:19,20
militating 100:20
mill 111:15
million 27:2 48:1
191:11 193:2 259:21
264:19 266:8 324:17
351:9 404:3,5
millions 138:4 404:22
414:3,4
mind 78:7 83:12,13
102:17 127:19 172:5
268:1 283:17 314:21
360:11 394:9 426:8
mindful 139:22 207:13
270:14
mine 205:19 311:21
319:1 341:6 343:21
Minell 415:4
minimal 400:1
minimize 88:11
minimizing 88:16
minimum 149:12
minor 400:22
Minter 389:6
minute 18:17 19:6,11
63:5,10,11 134:14
171:7 174:2 305:16
306:22
minutes 19:1,17,20
96:8 264:17 336:16
342:18 367:14 409:7
misappropriation
403:10
missed 300:11 337:3
383:4
misses 44:4
missing 372:9
mistake 103:16 106:22
mistaken 391:21
mistakes 177:16
mitigate 325:10
mitigating 15:1 364:2
Mobile 2:20 148:8
321:22
mode 364:21 388:12
395:6
model 42:14 48:3
152:10 260:5 354:17
models 57:8,10 313:5
315:12 352:8
moderating 19:2
moderator 17:1 245:1
- modern** 38:7 41:22 42:7
43:2 335:3 384:13
393:16 404:7
modest 411:17
molecular 14:5 220:5
223:6 224:6
molecule 132:14 221:3
223:12
molecules 107:18
213:1 242:6
MONDAY 1:8
money 70:3 98:12
309:5 323:11 328:17
331:12 332:8 333:11
348:13 361:15 365:1
monopoly 114:13 131:8
354:9 418:17
monsters 339:14
month 6:12,13 10:4,5
58:15 319:10
months 74:7 117:10
125:15 233:19 268:4
320:1 359:3
Moonshot 313:15
Moore 257:19
moot 369:17 373:14
morning 6:4 8:7 17:10
18:16 21:7,9,14 29:11
29:13 37:12,20 52:19
57:20 81:5 90:13
95:19 103:1 112:13
120:12 157:8 164:8
182:1 270:17 275:14
311:9 424:11
Morse 151:15 153:13
383:14,16 384:14,15
395:3
Morse's 395:5 396:1
motion 119:8 168:4,7,8
168:14 259:17 268:10
268:14
motions 101:3,10 102:3
102:15 260:1
motivate 57:14
motivated 161:5 348:7
motivating 347:20
motivation 420:11
Mountain 82:1
mouth 103:3
movants 101:3,11
move 29:5 38:1 64:7
71:13 102:18 120:21
126:6 144:16 204:18
205:6 344:15 412:13
420:1
moved 167:4 201:19
202:1 285:15 286:2
movement 30:15 36:22
- mover** 420:11
moves 282:9
movie 151:6
moving 64:20 72:8
83:13 94:2 126:17
145:7 199:12 234:2
241:21 243:2,10
327:5 334:1 371:21
379:8
MPAT 339:10
MPEP 28:8 260:17
341:6 363:8
much-needed 138:7
multi-billion 166:12
multi-city 429:10
multi-trillion 32:17
multiple 242:12,14
254:14 420:22
multiply 340:15
multiplying 339:21
muster 175:2
mustn't 38:12
mutations 356:9
mute 135:6 342:22
myriad 2:14 14:6 39:1
91:17 105:7 107:12
108:3,19 109:5,6
123:14 131:19 132:6
197:21 198:4 212:21
237:20 315:22 355:18
400:11
Myriad's 14:6,13,17
mysteries 387:1
mystery 365:1
-
- N**
-
- Nadine** 337:4 380:13
429:12
nail 249:8
naive 256:10
naked 157:4
name 52:19 90:14 96:2
108:10 191:4 205:10
244:21 248:5 250:5
255:13 301:5 321:20
404:9
name's 44:12
named 404:19
names 268:1
narrow 52:7 116:10
125:8 402:17 403:5
404:14 414:7
narrowed 49:8 315:6,9
narrower 68:17 219:17
219:19 351:22
narrowest 188:17
narrowing 196:8,16
321:11 337:22

- narrowly** 92:20
Nate 17:1
NATHAN 1:20
nation 196:20 330:15
nation's 9:20 104:18
 105:2 192:16 193:1
national 104:13 107:17
 150:2 193:4 206:7
 209:7 237:6 313:10
 373:19
natural 11:19 31:20
 91:8,12 92:21 93:7
 94:18,20 107:13,22
 108:1,16 123:2
 131:13 136:8 139:15
 140:19 158:15 208:13
 208:18 213:3 219:2
 229:11 257:17 327:11
 368:9 372:18
naturally 14:18 313:6
naturally-derived
 212:19
naturally-occurring
 212:8
nature 11:19 14:10,12
 31:20 41:22 65:1 91:7
 91:11 92:20 93:7 94:6
 94:18,19 108:14
 116:1 121:13 122:1
 123:2,16,18,19 126:8
 129:15 132:3,7 136:8
 139:15 140:19 145:12
 158:15 194:10 204:6
 204:6,14 208:12,18
 247:14 253:14 288:9
 303:20 387:1 393:14
 394:17 417:1
navigate 349:8
Nazer 2:17 5:2 255:11
 255:13,14 261:19
 274:22 285:3 292:4
 293:2 295:11,13
 304:12 306:8
nearly 26:1 171:10
 375:5 387:16 403:20
 404:5
neat 152:9,16 154:21
neatly 392:13
necessarily 144:3
 167:15 198:4 224:1
 262:10 263:4 286:2
 300:2 303:15 304:10
 310:20 354:10 408:18
 414:6 415:1 417:21
 424:15
necessary 215:3,4
 226:14 251:15 381:2
need 20:9 32:19 57:11
 90:22 118:7 127:20
 131:3,4 133:3 136:4
 151:22 157:3 165:15
 178:5 181:6 185:10
 210:22 211:14 214:6
 218:9 224:15 226:18
 227:20 229:16,22
 231:8,17 233:6 238:4
 241:14 255:6 264:18
 272:1 276:22 289:3
 294:18 306:6 311:4
 319:22 332:8,8,8,9
 333:10 335:9 346:19
 347:13 353:14 354:15
 367:8 371:20 373:14
 387:5 390:15 399:6
 407:12 427:2,3
needed 16:9 94:8
 160:12 165:16 186:21
 215:14,20 229:9
 250:11 271:4
needing 359:12
needs 80:19 83:2 86:3
 93:14 111:19 114:20
 187:2,15 204:1 207:4
 228:9,22 232:3,10
 241:2,2 276:6 333:3
 338:14 422:6
negating 373:3
negative 54:20 55:20
 123:9 193:16 212:3
 220:11 277:21 302:6
 376:22 420:18
negatively 281:18
negotiating 24:4
Neil 2:3 4:5 21:16
Neilssen 384:17 385:1
 388:9,10,17,18
neither 104:22
Nelson 1:22 17:19
 68:21 131:11 188:10
 191:1 197:18 205:5
 210:18 218:6 219:21
 221:11 231:18 234:13
 242:20 244:13
net 266:16 267:9
network 82:19,21,21
 83:1 84:7,10,13 85:10
 88:12 148:11 302:15
 303:14,15 304:10
 377:21 420:11 425:18
networking 56:19 80:14
networks 24:11
never 42:3 50:15 179:9
 180:1 216:14 236:6
 237:8 241:8 246:20
 309:8 310:13,19
 319:15 338:8 365:12
 397:14 414:17,20,20
 417:6,7
new 24:22 27:18 28:6
 32:14 35:8 36:4 46:11
 51:6,6,7 53:21 55:7
 65:3,4,5,11,11 66:14
 66:15 68:9,11 70:13
 90:15 93:20 106:19
 108:21 109:16 135:12
 138:9 140:9 144:20
 145:2 149:10 152:3
 162:13 183:16,18,22
 192:18,19 199:11
 208:9 216:12 223:11
 223:12,22 224:1,3
 239:7 266:13,15,16
 267:8,10,19 273:9,12
 273:15 291:10 295:11
 295:14 323:1,2
 324:18 330:18 333:17
 334:18 335:3,12,22
 342:15 368:19 369:16
 369:16 370:3,17
 371:18 372:1,6,11
 373:1,5 374:18 376:4
 398:15 399:9,20
 405:4,21 425:12,16
 425:18 427:15
Newman 27:16 83:15
 291:7
news 107:2 212:18
 259:12
Nielsen 383:1,15
nightmares 375:17
NIH 131:22
Nike 101:20
nine 125:15 403:19
ninety-ish 188:3
non- 11:5 106:6 300:20
 419:12
non-abstract 33:5
 115:11 174:18,19
non-eligible 11:22
non-invasive 421:11
non-novel 267:17
non-obvious 341:14,22
 397:8
non-practicing 137:11
 165:6
non-profit 351:3
non-publication 319:14
non-technical 417:10
non-technological
 373:11
nonconventional 90:2
nontechnical 171:6,8
 171:11,19 172:6,19
 173:1,3 177:6
Noonan 2:7 4:11
 102:18,19,20 103:1
 124:22 131:12,20
 134:4
normalized 138:20
normalizing 138:20
normally 87:8
norms 69:9 212:2
note 7:1 43:1 56:10
 67:16 199:5 201:16
 343:3 366:14 373:20
 395:22
notebook 363:18
noted 158:6 161:16
 162:19 397:1 398:3
 398:21
notes 300:9 375:8
nothing's 45:18
notice 241:19 264:1,4,7
 265:9 338:13 370:15
noticeable 175:17
noticed 61:22 218:11
noting 170:12 408:16
notion 29:19 31:11
 33:22 35:13 77:12,15
 77:18 79:3 140:11,13
 230:8 379:9 386:19
 387:12
novel 55:2 145:2
 341:13,22 397:7
 415:14
novelty 11:5 76:22
 172:2 173:11 174:6
 175:13 176:4,17,19
 177:3,11,15 184:20
 415:7
November 370:10
nowadays 346:9
NPE 304:14
NPEs 300:20
nuisance 42:14 48:6
 382:14 386:16 420:20
number 42:15,18 48:18
 56:13 79:17 85:14
 92:1 97:5 102:2
 131:12 149:4 166:18
 166:22 181:4 192:15
 205:19 307:1 313:5
 315:14 319:17 327:2
 329:16 339:21,22
 340:14 343:6 345:3
 369:8 370:20 376:22
 377:6,13 398:2
numbers 193:6 264:12
 265:2,22 301:14
 340:7,17 351:13
 377:15
numerals 396:3

numerous 158:20
166:17 168:18 192:8
371:9
nuts 366:3
Nutter 2:14 205:11
NYIPLA 2:6 94:1,14
123:12 140:16
NYIPLA's 91:2 93:8

O

O'Reilly 383:14,16
384:14
Oakland 245:14
Obamacare 104:13
object 165:12,13
365:22
objection 222:21
objective 368:14 370:6
objectives 371:20
obligated 362:7
obligations 8:10
obscured 165:12,14
observation 89:16
133:13
observations 53:4 86:6
89:1 215:1 221:18
368:11
observed 195:18
obstacle 118:14
obtain 55:1 231:9
402:11 407:19
obtained 395:14
obtaining 251:11
obviate 118:6
obvious 25:8 53:21
55:4,7 62:10 111:2
329:19 384:7,8
obviously 71:15 145:7
166:12 169:12 181:6
188:17 190:1 247:16
281:12 285:8,20
289:8 309:5 314:9
323:19 325:10 327:16
346:9 347:1 425:20
obviousness 11:6
47:16 48:11 64:9 73:8
77:1 144:11,22 145:6
145:18,18 148:6,13
148:16,17,18,21
149:15 176:15,17
183:6 360:22 399:10
415:8
occupy 39:15
occurred 10:4 25:21
occurring 14:18
occurs 225:5 232:22
October 10:3 82:10
odd 120:13

odds 101:5
offend 179:17
offensive 45:9
offer 37:20 163:16
315:18 374:20
offering 372:17
Office's 138:21
Officer 1:12,14 17:14
offices 6:8 8:16,20 20:2
81:15 254:3
official 88:11 308:11
oftentimes 184:22
OIP 153:16
old 40:17 155:6 183:21
184:2 245:10 259:19
301:12 339:14 387:7
401:19 413:4
once 41:21 142:14
182:6 197:15 198:4
240:10 318:4 333:5,7
405:18 414:14 426:15
one-hour 28:19
one-size-fits-all 232:2,7
ones 27:12 49:22 50:1
122:20 129:6 173:18
267:9 353:18 409:16
409:17 416:20
online 6:8 7:16 22:7
123:21 246:2 383:13
open 20:20,20 130:2
141:21 275:21 367:6
379:7 390:20 409:4
opened 135:13
Openet 83:7
opening 4:3 56:16
113:11 214:19 334:6
367:13
operate 55:9 73:15
169:17 187:2 258:9
315:18 373:6
operates 142:12
operating 137:16
169:16
operation 46:20,22
opined 40:11 214:13
opinion 23:7,14 27:17
54:6 58:11 83:9
113:15 118:12 201:20
240:19 252:3 332:10
335:11 371:4 373:8
388:6 395:15 411:5
423:18
opinions 58:8 91:16
336:16 342:13
opportunities 8:22
opportunity 80:5 95:22
111:19 112:8 135:18
149:22 157:11 163:21

168:2,2 192:2 197:16
197:22 205:10 221:12
233:1,4 245:7,12
277:7 323:12 324:4
333:19 367:6 370:11
380:16 400:8
opposed 119:14 144:11
146:22 277:21 293:21
299:17 393:19
opposite 68:5 71:18
220:17 425:2,8
oppositions 102:4
optical 38:11
optimal 10:8
optimizing 13:4 377:20
option 219:4 243:4
370:17 379:10
optional 325:14
options 163:18 234:15
265:4 313:17 379:7
Oracle 2:12 170:6
oral 103:21 108:19
orange 55:17
order 19:4 48:6 90:19
156:1,19 219:11
231:9 243:15 264:15
306:12 340:14
ordered 28:3
ordering 24:4
ordinary 54:13 99:20
119:6 176:14 184:16
organisms 204:21
240:16
organization 2:15
185:14 211:4 262:5
organizing 377:22
oriented 288:15
original 393:17
ought 66:12 76:15
211:13 217:22 235:10
342:10 388:15 390:5
390:19 413:3 421:1
outcome 107:4 108:7
248:18 407:7
outcomes 96:21 206:13
209:20 380:7 407:2
410:12
outer 104:5 213:20
outline 408:21
outperformed 258:13
outputting 87:7
outrage 43:13
outreach 211:7
outright 368:14
outset 233:10 278:13
399:22
outside 95:12 124:10
175:4,4 214:21 231:8

254:11 310:2 349:20
358:9 421:13
outstanding 342:13
outweighing 270:12
over-rewarding 181:12
overall 6:17 145:8
194:1 315:1 351:1,13
375:11 378:9
overarching 419:17
overbroad 401:19
overburdening 181:13
overcome 222:22 239:8
252:16
overcoming 98:13
overcorrecting 228:1
overcorrects 160:14
overlapping 262:20
overlies 145:3
overlooked 173:17
overly 139:9 140:1
162:3 196:15 409:22
overreaching 160:10
160:15
overreaction 402:15
overrule 107:7 372:2
408:22
overruled 67:19
overruling 68:19
overseeing 164:11
oversimplifying 405:22
overtly 30:14
overturning 41:4
201:17
overview 17:8
overwhelming 278:12
overwhelmingly 71:21
owe 328:9
owner 100:22 216:10
216:12 333:20 402:1
owners 401:12

P

P-R-O-C-E-E-D-I-N-G-S
6:1
p.m 134:20 244:17,18
307:1,3,4 429:16
pace 358:14
package 180:10,12
373:16
packages 152:10 180:9
183:17 365:22
PAEs 305:4,10
page 344:7
pages 58:8
paid 207:4 294:22
pain 43:8 70:21 332:20
334:20 351:15
pains 294:15

- painting** 236:2 365:18
pair 10:1
paired 237:2 373:17
palatable 201:19
 367:16 374:17 422:15
Pan 56:17
panacea 417:21
Panda 151:6
panel 1:18,18,19,20,21
 1:22 2:1,5,9,13,16,19
 3:7 4:4,9,14,19 5:1,5
 5:12 7:6,7,18,20 18:9
 18:15,22 19:18,19
 20:7,10,10 21:6 56:14
 56:21 57:19 67:9 72:4
 75:3 81:4,11,13,13,20
 112:14,14 113:10
 123:22 124:21 133:7
 134:13,16,22 149:22
 177:21 183:12 190:21
 190:22 230:12 245:2
 272:5 307:1,7 312:16
 343:11 350:2 352:1
 355:2 366:15,16,21
 400:5 408:16 419:3
panelist 21:6 312:12
 321:19 326:20 335:20
 365:6 366:22 375:2
 380:12 392:1 400:5
panelists 7:8 15:17
 218:8 231:19 232:16
 245:6 271:5 272:10
 275:1 295:21 345:6
 361:16 362:15 408:14
 409:4
panelists' 285:22
panels 18:14,16,18,21
 230:13 289:13 410:17
panic 45:16
paper 165:15,21,22
 166:6 172:5 204:10
 264:14 300:10 365:17
papers 63:8
paradigm 405:8
paradoxically 124:22
paragraphs 342:10
parallel 185:4 363:5
parameters 334:7
paraphrase 123:21
 295:18
paraphrasing 75:6
parcel 421:4
parent 152:3
parents 328:2
Parke 385:1
Parker 67:19 68:19
parsimonious 105:6
parsing 341:1
- part** 46:3 56:14 61:13
 64:3,7,8,9 69:8 70:12
 70:14 88:16 104:17
 115:5,7 132:16 146:9
 155:2 162:3 167:16
 174:13,14,18,20,21
 175:1,8,9,10 192:14
 208:14 212:11 226:21
 244:1 246:8 263:16
 282:16 296:22 333:12
 368:2,16 372:2 374:5
 381:17 394:20 408:15
 409:1 411:2 415:7
 421:4 427:17
participant 96:7,13
 113:7 419:3
participants 7:3 8:14
 97:9 211:17 370:16
 370:21 371:7 373:22
 429:6
participate 8:12,22
 312:15 370:11
participating 8:14
 81:22
participation 338:10
particular 41:16 42:10
 45:15 46:20,21 47:1
 76:5 91:10 93:4,18
 101:3 121:12 126:7
 126:11 129:13 143:12
 144:6 145:13,22
 146:20 153:2,21
 154:17 155:16,16
 157:5 160:21 161:1
 166:8 178:5 179:3,15
 199:5 206:2 207:4
 210:11 211:9 219:1,2
 219:3 266:14 286:4
 305:10 313:11 316:3
 317:20 353:1 354:17
 356:15 397:7 402:19
 429:11
particularly 12:3 25:13
 27:6 46:17 50:9 60:8
 96:18 121:22 206:21
 207:9 225:15 226:2
 231:6 256:17 257:11
 260:22 264:3 271:19
 274:1 302:7 306:12
 351:2,12 367:11
 429:7
parties 402:10
partner 44:14 52:20
 103:2 205:11
partners 331:7
parts 92:2 126:16 148:4
 148:4,6 242:3 356:17
 371:21
- party** 272:14
pass 175:2 185:9,9
passage 388:20
passed 57:13 295:14
passes 72:22 358:19
paste 25:12
Patel 2:7,7 4:10 81:15
 81:16,17,19 90:9
patent's 378:22
patent- 11:21 14:12
 31:11,16 34:9 65:20
 92:2 109:3 228:18
 253:11 406:6
patent-able 277:12,22
 284:21
patent-eligible 10:2,9
 10:17,21 13:15 14:19
 15:7 16:13,18 31:18
 55:11 66:5,12 86:8
 88:18 90:1 92:7 95:11
 105:10 108:14 112:9
 114:21 122:9 131:18
 132:9 133:6 145:13
 159:12 163:8 168:13
 196:9,16 208:20
 209:20 210:8 211:8
 211:20 230:5 252:20
 372:14 376:1 402:17
 406:10
patent-ineligible 13:14
 30:21 31:5,14 110:11
 132:4 161:13 221:6
 253:12 370:8 406:1
patent-intensive 194:4
patentability 11:4,5,18
 13:18 28:14 34:10
 57:5 124:6,6 125:22
 137:4 139:6,10 140:1
 142:12 160:6 182:9
 182:13,19 201:6
 204:20 209:10 212:2
 224:15 277:8 296:20
 352:19 368:6 369:5
 369:15 370:3 396:9
 396:13 397:15 399:5
 399:22
patentable 34:15 38:6
 45:18 46:1,10,11
 48:14 49:17 50:1 55:3
 62:3 65:17 66:4 68:10
 77:10 95:9 106:6,7,8
 126:18 138:8 144:19
 147:12 151:18 158:12
 172:15 193:13,17
 195:10 208:22 212:20
 215:13 221:4 236:1
 237:21 238:6 240:16
 297:9 338:4 339:10
- 339:15 340:20 342:6
 342:7 344:20 350:5
 353:4 370:7 378:20
 390:15 415:1 416:12
 416:12 418:19 421:10
patented 57:10 107:9
 136:22 137:2 213:8
 216:9 275:11,19
 397:21 420:10
patentees 160:10,15
 161:12 400:19
patenters 351:4
patenting 39:4 57:8
 82:17 107:13 110:15
 111:2 127:18 139:14
 215:5 249:21 270:13
 275:8 294:11 372:13
 372:17 423:1 424:6
 426:8
patently 40:17
path 39:18 124:3,19
 141:1 146:11 226:2
 241:8 302:21 374:21
 411:7,7 421:2
Pathology 14:6
paths 145:20
patient 221:5 261:8
 276:22
patients 310:15
Patrick 2:20 5:7 326:20
Patton 2:8 113:1,6
Paul 1:10
pause 170:10 364:22
 364:22
pay 51:20 155:17
 156:15 167:11 193:4
 354:7 357:11
paying 24:5 255:21
 310:2 332:1 353:22
 362:18
payment 246:8
payments 322:13
pays 426:12
PDFs 336:20
pears 55:17
pejoratively 120:18
Pelt 2:4 4:7 57:20,21,22
 64:14 74:19 78:22
penalized 362:12 364:9
penalizing 326:7
pencil 151:17
pending 158:18 159:8
pendulum 59:6
Penney 2:11 135:16
 137:21 138:3 140:2
 140:13 141:5 142:4
 224:19
people 18:5,6,12 19:21

- 20:1,18 22:7 29:7
47:8 58:10 70:9 71:10
71:19 72:1 74:13
105:3 109:19 120:12
120:13 125:2 150:7
152:15 153:10 155:10
155:17 156:5,15
181:10 224:12 227:16
228:4 237:8 243:20
245:14 256:14,19
257:10 260:1 262:22
263:5,16 269:18
270:1 271:18,18
272:17 273:16,21
275:20 285:19 294:2
313:16 324:11 327:20
329:11,16,21 331:9
331:17 333:1 335:8
350:3 351:4 356:3
361:11,14 364:5
365:7 375:9 377:16
380:18 394:11 398:2
402:13 404:22 406:8
413:6,15,17 425:4
426:21
- percent** 25:20 42:2
98:17 99:10 107:20
107:21 173:6 175:19
175:21 188:2,4 193:1
258:13 266:4,6
300:16 311:20 320:19
320:21 321:16,17
324:12,12,16,18
351:7 376:20 403:19
403:20
- perfect** 294:20 318:18
374:11 421:20 422:9
422:13
- perfectly** 150:14 221:3
388:13,13 418:19
- perform** 405:10,18
- performance** 220:10
- performed** 172:4,21
173:12 175:5 177:4
250:19
- performing** 25:6 118:21
- perilously** 39:7
- period** 7:7 20:6,19 39:7
131:14 137:8,9 238:6
313:1 319:11 358:18
360:17,18,19 361:7
427:10
- periphery** 42:4
- Perlmutter** 1:12,14 6:3
8:5 17:13 78:9 122:11
354:20 366:20 367:4
375:1 380:11 391:22
400:4 408:13 421:15
- 428:15
- permissive** 104:16
- permit** 73:1
- pernicious** 415:22
- perpetuate** 407:16
- perplexed** 54:5
- persist** 227:9
- person** 6:7 7:10 8:10
19:6 61:22 70:7 102:8
118:1,7 176:13
184:16 244:20 293:16
- personal** 53:2,4 124:8
219:7 285:15 424:1
- personalized** 213:13
- personally** 170:2,5
301:18
- persons** 393:3
- perspective** 6:17 53:3
56:7,11 67:19 71:17
72:20 115:16 130:19
135:19 176:13 200:12
224:4,11 226:1,19
239:11 240:21 243:22
273:4 276:9 277:18
286:1 287:1 322:11
347:9 354:16 361:22
- perspectives** 234:8
- persuasive** 28:11
- pervasive** 317:9
- pet** 202:7
- peter** 2:3 3:10 4:7 5:16
52:16,19 174:16
366:11 380:12
- petition** 101:8 205:22
207:17
- petitioned** 207:6
- petitions** 84:19
- PGR** 101:9 125:15
- pharma** 378:14
- pharmaceutical** 212:5
242:9
- pharmaceuticals**
205:13 231:2
- phenomena** 91:8,12
94:18
- phenomenon** 11:20
31:20 93:7 94:20
123:2 136:8 139:16
140:20 158:15 204:6
208:13,19 229:12
368:9 372:18
- philosophers** 152:4
- philosophical** 63:6
285:4 287:1
- philosophically** 275:18
- philosophies** 275:22
- philosophy** 275:9
284:20
- phone** 233:15 234:3
338:8
- phrase** 133:14 145:22
- phrased** 54:20
- physical** 21:20 22:19
23:1 30:14 31:19,21
51:16,17 80:11
- physicists** 282:12
- picket** 344:1
- picking** 53:6
- picks** 402:22
- picture** 166:2 257:12
258:22 286:3 380:21
- piece** 68:9,11 71:2,3
102:7 130:7 165:15
165:21,22 166:6
265:7 266:21 269:4
365:17 373:5
- piecemeal** 109:22
- pin** 343:5
- Piper** 343:18
- place** 31:21 52:12 91:1
133:5 138:9 182:5,14
184:5 216:17 278:18
304:4 376:21
- placed** 174:9 194:8
292:20 374:13
- placeholder** 339:3
- places** 287:20
- Plager** 83:15
- plain** 325:18 336:21
- plainly** 31:2
- plaintiff** 268:11,12,13
268:15 389:1
- plan** 113:11 247:1
279:10 363:9
- planet** 339:1
- planned** 387:10,13
- Plano** 135:16
- plans** 262:14
- plant** 108:22 212:15,15
- plants** 213:15
- platform** 223:10 283:11
283:12 303:17 331:1
- platforms** 223:20
- play** 32:5 169:4 200:15
200:21 244:10 291:2
420:6
- played** 96:15 97:16
- players** 42:13 242:13
242:15 245:17
- playing** 281:3 324:13
420:19
- plays** 169:3 291:15
- pleaded** 83:8
- pleading** 98:15 168:3
280:12 415:11
- pleadings** 168:5
- please** 7:12 19:14 21:2
21:17 22:11,14 23:3
23:12 24:2,15 25:2,9
25:18 26:4,11,20 27:4
27:14 28:1,16 29:3,22
30:16 31:9 32:1,22
34:7,18 35:12 36:10
66:18 83:21 86:5,22
87:15 88:21 89:15
198:2 202:18,21
203:14 204:2,12
205:7 207:22 307:6
309:3 311:2 314:20
316:2,19 318:1,22
320:12 327:7 329:22
331:18 332:8 333:16
334:9 335:1
- pleased** 6:5 380:17
414:13
- pleasure** 7:20
- pledging** 24:5
- plenty** 303:5
- plurality** 87:18 255:22
- pockets** 325:4 380:18
412:15
- point** 19:14 35:15 41:11
53:6 54:19 56:6 73:17
88:9 143:11 149:1
172:2,17 173:11
174:6 175:13 176:4
176:16,19 177:3,11
177:15 180:15 181:5
182:22 184:20 185:19
190:7 208:15 223:5
225:1 233:2 237:19
240:20 243:21 263:6
267:13 276:10,20
284:11 290:22 297:20
302:2 303:2 309:10
342:19 345:16 352:16
353:11 354:21 355:3
361:7 362:8 377:6
379:8 401:13 406:9
422:13
- pointed** 43:7 59:6
148:14 301:19 311:9
365:7
- points** 46:12 53:8 93:19
133:19 138:10 187:13
224:14 276:5 291:2
326:5 381:5
- policies** 191:17 193:8
- policy** 1:12,14,15 3:8
17:14,18 105:1
142:21 150:6 164:16
169:11,15 191:8
209:4 211:13 214:16
214:18 312:20,21

314:16 350:10 368:1
 378:9 380:6 398:20
 401:6 402:22 404:11
 410:12 417:2 422:5
policymakers 214:8
political 374:9
politically 295:8 367:16
 374:6,17 422:9
pool 421:12
poor 29:2 43:7 160:15
 160:16 165:1 402:9
pop 133:18
popular 43:12 100:16
 201:22 394:3
populated 87:21
population 256:19
 324:16
portal 6:9
portfolio 244:2 248:8
 248:14 250:7,8
 254:10 300:17 302:14
 303:11 310:8 376:20
portfolios 96:22 244:6
 420:7
portion 386:18
pose 201:1
posed 141:8 198:7
poser 111:11
posing 210:14
position 26:18 53:2
 150:5 162:18 182:17
 196:21 206:17 207:20
 226:6,10 335:10
 364:11,16
positions 150:6 274:22
positive 123:5 187:10
 220:11 254:12 277:20
 391:15
positively 281:16
possess 104:21
possibility 72:16 100:9
 355:8 371:13
possible 9:16 19:4 47:9
 47:10 48:8 107:8
 134:9 160:2 170:19
 184:3 242:1 243:9
 259:12 367:9 374:6
 399:7
possibly 139:16 231:19
 415:5
post 290:2 377:14
post-Alice 97:2 164:18
 170:8 173:16 176:22
 277:4 296:1,3 361:18
post-grant 41:7 101:4
 101:22 125:1
post-Mayo 313:1
post-solution 12:22

postulating 389:9
potential 98:2 100:12
 186:12,14 200:7
 376:7 400:19
potentially 59:2 65:11
 98:10 139:22 255:8
 302:21 415:1
power 146:15 153:15
 393:13 394:16 395:6
 419:20
powered 336:2
powerful 268:18 425:22
powers 103:13 104:17
practical 45:2,5 48:16
 51:11 62:8 67:18
 94:17 97:17 128:20
 140:18 164:15 201:20
 216:19 231:13 375:20
 376:8
practicalities 259:2
practically 61:8 172:3
 173:4,12 175:5 177:4
 184:22 369:20
practice 23:16,19 25:7
 54:21 100:15 132:22
 136:1 141:11 175:2
 205:12 357:20 363:9
 398:5
practiced 109:15
practices 22:22 24:7
 147:9 172:3 173:12
 175:4 177:3 186:20
 343:12
Practicing 300:21
practitioner 29:17 63:1
 86:16 89:18
practitioners 235:7
prayer 39:9
pre 289:21 363:7
pre-72 391:13
pre-AIA 363:12
pre-Alice 167:9 302:7
 322:12 345:6 364:13
pre-Bilski 167:9
pre-heat 384:5
pre-State 137:18
precedent 15:13 80:18
 116:9 151:9 214:14
 236:20
precise 341:18
precisely 47:4
precision 313:11
 314:17
preclude 122:19 141:12
precludes 11:18
predates 426:5
predict 407:2
predictability 174:4

175:16 202:11
predictable 138:13
 206:19 231:4 253:13
 370:6 380:7
prediction 257:19
predictions 258:17
predictive 220:11
predisposition 14:8
preempt 92:19 93:6
 94:6,19 119:15
preempting 118:20
preemption 114:1
 119:11,11,13,13
 122:7 150:20 153:9
 154:8,13 179:21
 181:8 198:17 407:9
preemptive 101:15
 153:9 374:2
preemptively 160:10
prefer 129:7 337:18
 342:20 345:18
preferable 129:4
preference 186:3
preferred 179:18
pregnant 195:8
preheating 384:19
 385:10
preliminary 100:1
 411:14
premise 271:16 368:17
prepaid 303:19
preparation 222:8
preparations 212:7
 213:2
prepare 90:19
prepared 163:16 186:7
prerogative 104:22
prescription 241:4
prescriptive 233:1
present 1:14 3:17 68:12
 76:2 135:18 136:4
 157:11 163:22 195:19
 209:5 312:13
presentation 90:19
 170:16 350:7
presentations 408:15
presented 46:9 60:21
 219:15 365:20 391:3
presenters 123:7
presenting 307:18
 312:16
presents 58:3 67:6
 134:9 139:18
Preserve 177:1,5
preserving 354:17
president 90:17 163:8
 307:13 313:13 392:5
President's 314:17

presiding 1:12
pressing 38:16
pressure 41:17
presumably 131:18
presumption 98:8,20
 99:8
presumptuous 129:17
presuppose 75:20
pretend 302:5 390:1
pretending 302:19
pretty 38:21 84:17,18
 86:9 87:2 90:5 169:2
 199:4 201:14 206:9
 208:16,20 233:11
 240:12 247:12 256:3
 295:16 304:17,19
 319:12 336:9 345:12
 384:7 390:19
prevalent 33:11
prevent 98:10 160:9
 373:1
preventative 365:2
preventing 122:7
 153:10 310:17
previous 6:11 140:21
 301:11
previously 95:7 141:19
 162:20 196:5 259:14
 286:14 406:5
price 316:11 353:21
 354:12
prices 43:13 74:8 354:7
primarily 58:16 96:11
 113:3 214:12 248:15
 249:18 262:7 314:4
 316:9
primary 138:20 170:16
 245:17
prime 339:21,22 340:14
 340:18
principal 198:14
principle 113:19 159:21
 178:20 368:14 374:17
 384:4 385:9,10
 388:22 389:2,7,8,16
 410:8 419:18 423:3
principled 367:15
 422:14
principles 9:22 104:4
 179:12 209:18 382:10
 389:4 392:11
print 318:2
printing 395:8
prior 34:14 35:21 37:2
 54:2 63:12 64:8 77:7
 77:9 85:19 89:13
 101:6,7 109:15 115:4
 116:15,19,20 117:6,6

117:22 118:20 120:20
 146:3 147:1 149:4
 160:5 167:1,22 169:7
 169:7 184:14 185:8
 283:2 340:10 355:2
 361:3,5 366:1 383:8
 388:21 407:22
priorities 313:11
priority 374:2
privacy 340:6
pro-eligibility 59:10
pro-patent 426:13
pro-presumption 99:6
proactively 265:5
probabilities 175:18
probably 48:10 58:10
 60:17 67:6 79:12,13
 84:20 150:7 158:7
 180:12 184:14 208:7
 215:18 221:18 222:3
 223:15 226:1,11
 263:16 284:4,6
 325:20 342:21 345:2
 356:12 363:20 375:10
 399:5 410:13
probe 106:1
probes 108:20
problem 46:16 47:3,17
 47:18 50:10 73:16
 74:22 83:5 85:22
 109:10 117:21,22
 118:4,13,14,17
 119:14 123:8 125:3
 131:5,7 132:10,19
 135:3,5 136:4 154:13
 175:16 179:21 196:10
 199:5,17 200:15
 202:6,12 210:15,21
 225:12,19 226:21
 227:10 228:2 231:20
 238:20,22 239:7
 241:2,12 252:15,21
 253:22 254:21 266:20
 270:12 277:19 287:7
 298:21 305:21 325:10
 333:3 346:17 347:19
 356:18 357:11 362:8
 362:14 363:4 376:2
 380:1 386:8,15
 389:11 401:3 408:10
 421:21 427:19 428:3
problem/technical
 253:10
problematic 49:10
 51:13 52:2,2 91:18
 140:17 302:8 319:13
problems 43:10 90:3
 116:19 130:21 159:2

163:15 186:12 217:5
 222:9 225:13 227:4,9
 229:14 269:12 282:3
 386:17 427:17 428:7
procedure 78:5 117:17
 280:10
procedures 363:8,12
proceed 91:9
proceedings 101:22
proceeds 34:11
process 10:20,21 25:1
 27:19 35:2 40:3 45:12
 47:22 48:2,13 49:19
 56:14 60:4 93:15,18
 93:20,21 98:4 118:3,5
 118:8 143:21 144:20
 197:7 204:5 208:9
 241:9 246:12,12
 253:15 262:13 271:7
 280:2 281:13 296:21
 297:10,22 298:11
 303:12 323:7 329:14
 332:10 333:6 339:9
 339:13,15 358:21
 377:9 381:22 395:12
 427:15
processed 83:3 86:3
processes 26:8 162:12
 212:6 339:9,12
 340:19 341:1
processing 24:10 85:18
 86:9,10 165:8,16
 245:18 327:11
processor 32:14 33:10
 36:21
processors 32:6,9,10
 33:10 35:7
procured 222:19,21
produce 27:2 391:6
produced 145:17 161:4
 231:2 369:11
producing 42:9 264:21
 269:1
product 14:11 42:9
 108:9,13 152:14
 199:10 346:6 356:4
 357:10 359:9,9
 363:10,15,21 364:6,7
production 197:2 354:7
productive 17:3
productivity 404:21
products 14:7 31:19
 107:13,22 108:1
 131:13 162:11 192:19
 204:13 212:5,15
 219:3 233:14 251:16
 264:21 303:19 324:22
 345:14 378:15 403:14

profession 367:20
professional 154:5
 181:19
professor 37:14,16
 44:8,10 52:13,15 53:7
 56:12 58:2 67:11
 94:12 172:16 214:1
 238:10 266:1 270:16
 339:15 350:1 354:21
 380:12 383:3 392:10
 394:21 411:13 415:4
profile 355:19
profit 348:11
profitable 189:8 393:11
profits 354:9
profoundly 92:10
progeny 96:20 99:9
prognose 223:22
prognostic 213:11
program 17:1 32:13
 35:7 36:21 65:4 70:19
 339:5 422:8
programed 261:7
programmed 36:17,19
 47:2
programmers 71:20
programming 37:1
 166:2
programs 129:21
 137:14 339:17 390:14
progress 250:13 253:2
 263:12 337:12 405:15
 420:1 424:18
progressed 162:20
prohibited 348:3
prohibition 179:17
Prometheus 13:3
 159:19 194:13 221:8
 415:20
Prometheus's 13:7
promise 298:7
promised 272:7
promising 207:20
 212:19 374:11
promote 9:19 114:9
 163:20 200:4 250:13
 277:1 337:12 408:11
 412:16 417:7 418:6
 420:1
promoted 207:12 418:4
promotes 253:2,3
promoting 142:16
 191:14 424:18
promotion 170:15
 392:13
promptly 383:21
prong 144:7
pronouncements

213:22
proof 119:4 161:21
 363:7
proofs 336:17
proper 104:11 106:16
 125:13 136:13 138:11
 160:22 176:18 265:9
 407:7
properly 51:4 171:16
 347:20 400:17
property 1:17 7:22
 26:14 27:1,7 90:15
 133:2 157:10 191:6,7
 191:17 192:12 206:19
 335:13 394:7 420:5
proponents 370:1
proposal 57:9 128:18
 185:15 234:14 409:5
 416:4
proposals 163:18 201:8
 369:14,19 370:2
propose 383:18
proposed 27:17 57:6
 57:13 94:14 122:22
 140:16 144:15 230:21
 258:21 369:8 373:13
proposing 123:13
proposition 68:17
pros 186:13
prosecute 113:2 277:8
 291:21
prosecuting 35:16 60:4
 98:12 347:5
prosecution 60:18
 128:13 143:5,11
 149:1 161:10 171:6
 172:11 309:6
prosecutor 29:15 58:1
 81:21 143:5 341:12
prosecutors 257:15
prospectively 413:12
protect 57:2 171:11
 218:20 235:18,19
 247:15 248:8 252:22
 281:20 330:2,18
 331:5 334:20 335:12
 364:1 398:14,22
 408:2,5
protectability 398:18
protectable 395:1
 425:21
protected 172:20 179:1
 181:9 284:13 297:18
 303:6 335:10 356:21
 387:15 394:12,13
 425:14
protecting 173:3
 191:15 247:18 299:21

324:22 329:20 334:17
405:10 412:3 421:2
protection 11:14 26:10
27:1 72:12 97:7
132:16 142:6 153:20
160:2 161:3 177:8
179:13 195:15,22
199:13 206:13 212:12
212:14 217:8,15
224:7 231:13,14
242:4,4,8 243:19
272:18 276:1,7,7
303:3 316:5 317:20
318:9 321:10 351:22
354:3 355:3,6,9,14,20
356:2 387:13 397:4
protections 148:15
181:8 222:10 267:3
protects 155:13 279:9
281:16 284:11
prove 119:4,5 138:4
285:12 336:15
proven 12:1 91:18
119:3 164:18
proverbial 278:14
provide 29:1 50:8 53:16
53:22 54:6 70:20
91:19 106:17 111:15
111:16 138:15 141:2
147:15,21 162:16,22
197:7,16 225:12
243:18 254:6 291:18
303:17 305:5 363:7
367:10 375:5 384:15
407:1
provided 7:12 29:7
34:12 89:19 108:15
147:3 160:1 162:12
208:11 221:1 224:10
250:21 362:22 393:6
412:3
provider 356:7
providers 82:19
provides 108:6 176:12
225:11 241:18 253:21
275:10 354:7 397:2
providing 16:1 192:2
197:4 249:2 276:6,15
304:17 323:4 326:16
proving 310:22
provision 128:19
160:20 240:3 260:16
369:16 372:4,6,9,16
372:21
provisions 373:10
374:13 422:4
provocative 390:4
proxy 315:2

Proxyconn 101:20
prudently 160:5
PTAB 25:17 100:15,21
101:18 254:18
PTO 17:11 61:7 142:15
200:12,15,16,21
226:13 244:22 245:11
247:22 254:2 255:1
272:14 277:16 280:6
280:11 281:13,21
282:17 284:6 296:7
299:7 307:12 308:11
310:13 321:22 323:9
323:21 352:2 367:1
377:10 378:22 380:3
381:22 390:4 391:4,5
392:7 398:10 400:16
428:8
public 9:11 12:12 15:22
95:22 102:7 139:9
153:22 154:15 155:22
156:17 161:12 170:13
178:22 179:5,10
181:13,18 182:10,11
189:13 215:22 251:12
254:7 280:21 283:11
286:9 316:10,21
322:3 339:19 351:9
392:6 394:3 421:5
public's 154:2,14
170:14
publically 316:16
publish 323:1
published 100:2 131:15
131:22 207:12 252:11
publishing 243:14
325:19
pull 76:13,20 380:14
382:18
pulled 61:18
pulling 60:8
pulls 388:1
pumping 420:16
purchasing 152:19
pure 145:18 190:11
320:8,15
purity 108:17
purpose 32:10,13,19
33:10 35:6 82:5
130:14 142:1 160:8
160:13 161:3 182:3
261:8 276:22 330:3
385:15 386:22 393:12
409:9 424:18
purposes 181:5 182:2
386:5 396:5 399:13
pursue 280:4 281:10
pursuing 199:9

purview 236:5
push 38:4 71:18 128:15
141:18 265:17 412:10
421:1
push-pull 94:9
pushes 39:21 44:3 76:5
pushing 153:17 263:12
411:9,19
put 20:14 56:17 60:7,12
67:12 77:4 128:15
185:13 190:16 218:17
221:12 234:15 269:17
270:20 272:10 278:14
282:20 289:17 290:13
296:8,8 297:8 300:10
305:21 331:15 342:20
346:10 363:22
puts 158:3 162:7
327:19
putting 209:17 220:1
312:20,20 325:13
345:11
puzzle 266:22
puzzles 420:3
python 345:18

Q

Q- 281:8
Q&A 4:8,13,18,22 5:4
5:10,20 7:7 322:3
343:8 408:15
Q3 98:16
qualifies 35:3
qualify 174:20
quality 43:8 63:13,16
160:16 164:20 165:2
253:22 259:4 260:3
265:8,10,13 268:16
269:22 282:21 301:20
322:8 377:17 401:9
401:12,15 402:9
quantum 80:10
quartet 38:7 39:7
queries 87:6 229:7
query 183:19 227:6
396:8
question's 61:14
questionable 390:13
questioner 224:17
352:2
questions 7:11,16,18
19:20 20:4 64:16
66:15 80:6 107:14
133:8 136:10 141:8
150:15 158:20,22
183:10 198:8,13,13
198:18,22 199:1
200:20 272:9 275:13

285:4 295:18 319:2
333:17 349:6 357:19
380:10 390:22 428:16
queue 323:14
quibble 427:20
quick 224:9 242:21
271:13 289:7 388:5
424:20
quicker 124:17
quickly 70:13 198:9
278:5 282:9 309:19
360:7
quiet 214:8
quite 68:7 113:15
129:11 230:6 258:11
259:15 262:8 264:8
266:10 289:12 376:14
378:7 416:15
quo 257:7
quotation 384:22 388:1
quote 23:8,8,15 28:10
28:11 104:15 105:8
257:21 308:10
quoted 396:21
quotes 260:18,18
quoting 30:19 397:11

R

R&D 169:1 248:11
249:21 404:12 405:11
408:5
Rabbi 155:7
radical 382:10
Rai 312:17
raise 70:2 338:9 388:16
raised 120:12 139:5
185:16 224:14 276:18
391:1
raises 200:18
raising 286:17 328:7
ramifications 97:17
ran 36:17 293:6
random 12:20
range 11:9 198:8
380:17
ranging 146:5
rapid 92:4 121:9 123:15
137:5
rapidly 425:17
rate 138:13,19 175:20
175:21 188:3,4 312:4
320:21 322:7
rates 97:3 171:15 173:5
173:15 265:1 309:21
311:12,13 312:2
357:7
rational 179:13 184:17
367:15 374:16

rationale 100:20 209:4
 379:22
rationally 221:7
Ray 308:10
RCEs 326:12
re-identified 175:1
reach 11:13,13 41:2
 43:20 47:9 49:6,7
 120:2 235:2
reached 176:16
reacting 46:15
reaction 79:20 107:12
 201:22
reactions 409:5
read 84:16 103:5 116:4
 208:3 257:1 260:13
 322:18 327:12 385:2
 388:14 389:10 406:13
 423:17
reading 7:17 90:6
 104:16 116:17 132:1
 181:20 322:17 325:14
 329:4
reaffirm 216:18
real 46:16 54:18 131:2
 139:18 251:13,14
 266:18 283:4 293:22
 294:6,15,21 295:6
 301:21 302:4 305:13
 321:2 326:10 330:3
 332:20 333:3 376:2
 394:16 396:7 398:4
 411:15 419:6
realign 179:11
reality 139:9 172:7
 402:3,8
realize 125:18 333:9
 387:3
realized 329:5
reappraising 369:13
reason 38:16 130:18
 179:5 287:3,22 330:1
 389:3 402:10 418:20
 423:15
reasonable 194:7 226:1
reasonably 259:11
reasoning 50:6,12
 139:3 326:3
reasons 175:10 265:14
 303:10 313:3 331:17
 426:20
rebut 28:9
recall 216:4
receive 12:6 161:2
 197:5 224:7 272:6
 324:11
received 100:3 211:19
 300:17 376:5

receiving 84:8,22
 246:20 262:15 303:7
recess 366:19
recipe 218:2
recitation 251:20
recite 35:20 36:3 94:17
 145:14 158:14 254:20
recited 94:3
recites 93:5 180:9
 252:14,20 254:15
recodifying 372:6
recognition 109:16
recognize 161:20
 179:12 225:5,6 241:1
 335:7 381:11
recognized 159:17
 195:6 334:15 344:2
recognizes 291:17
recognizing 372:12,14
 409:6
recommend 152:17
 198:19 241:5 296:18
 296:19 360:4
recommendation
 152:15 289:16 327:14
 371:8 373:18 374:1
recommendations
 215:1 237:6 256:11
 325:9
recommended 370:21
recommending 296:11
reconcile 68:4 99:14
 100:19 221:7
reconciled 68:6
record 15:22 24:10
 84:14,22 85:10 87:20
 100:6 101:6,7 102:5
 134:19 244:17 307:3
 307:21 366:18 388:9
 429:16
recordings 391:14
records 24:6 84:9,10
 85:3 87:18
recouped 354:9
recovery 320:3
red 7:14 19:12 26:21
 208:8 258:9
redefining 330:17
reduce 32:19 177:7
reduced 12:14 23:8
reduces 403:13
reduction 363:8
redundancy 151:20
Reed 2:8 4:12 112:15
 112:16,17 120:6
 126:17 130:11
reeducation 358:20
Reemphasize 177:16

reengineer 346:8
reexplained 384:11
refer 29:8 216:2 419:11
 425:4
reference 79:19 209:11
 285:2 371:10 389:3,5
 418:9 419:16
referenced 373:21
 385:18 417:12
references 149:4
 383:15 385:21
referencing 329:10
refers 382:22 383:1
refine 207:8
refinement 372:22
reflect 20:22 299:3
reflected 56:2 318:5
reflects 401:6
reflex 31:6
refocus 229:17
reform 226:3 229:4
 260:9 295:16 313:18
reforms 258:20,21
 280:9
refrain 39:1,3
refresh 322:7
refused 400:13
regard 152:19 306:3
 368:20
regarded 12:21
regarding 101:12 144:5
 170:8 194:3 196:4
 225:10 287:6 333:15
 338:3 376:6
regardless 49:7 174:6
 174:21 237:18
regards 281:15 363:6
 364:18
regional 6:8 8:16,16,20
 18:2 20:2 81:15 135:1
 135:11
regions 191:12
register 198:7 199:1
 200:20 202:21 370:15
registered 320:10
registration 386:9,15
regularly 256:4
regulating 215:7
regulation 241:19
regulatory 241:17
 243:17
reimbursement 243:16
 314:16 357:7
reinforced 396:18
reiterate 211:21
reject 124:16 341:13,15
 341:18
rejected 56:5 141:7

199:20 213:4 298:1
 347:22 366:9 383:22
 395:10
rejection 26:2 28:18
 124:19 161:18 185:1
 185:2 323:13 324:2
 325:16 326:3 377:15
 378:1 395:20
rejections 25:13,16,20
 29:2 85:5 98:13 100:3
 128:6 143:9 249:14
 277:6 283:1 292:2
 310:8 323:8,10,16
 326:2,5 344:12
 350:16 377:12,17,19
 378:2,6,21
relate 188:2 309:13
 311:13 368:8
related 71:13 92:8
 120:11 136:15 137:5
 146:2 177:10,14
 192:13 193:12 231:11
 289:8 352:18 403:18
 407:19
relates 146:11,21
 309:10
relating 163:10 165:7
relation 230:14
relational 116:15
relationship 373:1
relative 99:20 154:13
 312:5
relatively 250:8 312:4
RelaxExpress.net 2:3
release 107:3 180:11
relevant 33:16 78:21
 333:5,15 379:20
reliable 231:4 407:1
relied 89:11 123:14
relies 9:10
rely 108:12 355:6,13
relying 287:11 422:3
remain 20:20 159:13
 196:10 218:13 249:21
 392:22
remained 10:18 11:1,8
remaining 368:18
remains 9:14 370:5
remarkable 39:15 214:7
remarks 4:3 37:20 61:5
 392:8 425:2
remedial 367:10 369:8
remember 31:22 32:4
 35:6,16 103:21
 104:12 109:5,12
 132:2 182:9 359:4
remembered 329:6
remind 110:21

- reminding** 74:2
reminds 251:18
reminiscent 287:8
remiss 142:19
remotely 8:12,15
removed 51:15
removing 154:14
 220:18 374:12
renaissance 365:18
render 93:11 165:17,19
rendered 137:18
rendering 98:18 165:10
 165:13
repeal 373:15
replace 118:6
replicate 426:14
report 42:11 43:7
 192:12 222:20 316:12
 386:14,14 391:7
 396:21
reported 222:21 316:9
 316:16
reports 391:15
represent 136:14
 205:14 206:4 262:19
 322:10 324:15
representative 106:2,3
 258:12 262:5 419:17
representatives 259:5
represented 205:19
 349:1
representing 90:15
 157:9 191:10
represents 311:3 324:4
reprising 374:8
request 60:14 270:22
 271:15 360:2
requests 319:14
require 28:2,12 159:18
 171:22 220:7 368:19
required 87:20 92:15
 138:3 187:5 207:2
 219:12,14,22 220:2,3
 233:13 279:17 408:4
requirement 11:3 57:10
 94:5 120:10,22 181:1
 181:3,9,16 199:21
 203:16 243:14 369:2
 369:21 370:18,22
 372:7,12 388:4
requirements 11:5
 142:3 182:8 220:13
 368:5 369:5,6,15
 370:3,5 383:10 397:5
 397:6,22 401:21
requires 64:8 118:1
 174:12 184:15,17
requiring 25:16
- reread** 337:16
research 16:5 102:11
 114:4 197:2 215:22
 237:7 266:14 312:17
 373:17 377:5 378:13
 403:13 414:4
reserved 400:17
resolution 72:9 82:7
resolve 94:8 158:20,21
 183:9
resolved 175:12
resort 190:6 306:15
resource 88:17
resources 58:17 62:16
 88:12 95:4 174:1
 182:11 189:14 226:14
 226:18 251:5 266:10
 322:22 419:10
respect 59:15 100:7
 143:12 189:20 390:7
 417:15
respectful 255:19
respective 97:12
respectively 324:12
respects 214:2 236:5
 429:3
respond 80:5 193:20
 282:18 284:18 421:16
responded 148:1 196:5
responding 199:6
 378:5
response 144:14 147:4
 323:20 324:2 344:8
 370:14
responses 282:17
responsibility 41:20
 164:11
responsible 248:7
 266:16
responsibly 278:20
rest 69:12 155:9,12
 173:11 179:1 321:3
restate 369:15
restaurants 304:16
restore 400:1
restraints 200:3
restrictive 290:10,10,21
 290:21
restructuring 348:6
result 45:14 47:3 48:9
 68:14 118:15 119:15
 119:16 122:2 151:11
 151:14 152:21 153:2
 153:3,11 154:3,10,17
 155:19 157:4,22
 162:2,17 178:2,4,17
 178:18 179:4,8,16,22
 180:7 184:1,2 188:13
- 212:21 250:21,22
 323:8 349:21 355:11
 364:9 404:13 407:8
resulted 314:1
resulting 251:5 254:7
results 167:15 194:4
 231:3,3 253:6,7
 288:15 411:14
resumed 134:19 244:17
 307:3 366:18
resumption 101:21
resuscitation 277:20
 277:21
retailers 225:16
reticence 104:18
retroactive 362:3
return 42:3 180:12
returning 27:17
returns 258:14
Reuters 309:6
reveal 387:1
revenue 193:2 279:13
 324:6
revenues 266:7
reversal 25:17 39:8,17
 111:22
reversals 111:4
reverse 243:6
review 41:7 94:22 125:1
 125:1 236:17 386:3
 417:13
reviews 101:4,4 111:1
 327:12
revision 57:6 72:22
 412:11
revisit 237:5 238:4
revisiting 100:14
 175:10
revolution 330:9,14
 384:3
revolutionizing 404:7
revolutions 396:15
rewarding 253:4
rewrite 208:5
Reyna 90:4 261:5,6
rich 179:19 200:2
 397:12,14 411:8
 429:1
Richardson 259:10
rid 164:19 165:1 167:11
 168:3 169:6 201:3
 203:18 228:3,10
 235:14 365:11
rightly 268:16 311:16
rights 114:14 331:8
 368:8 392:15,20
 402:2 403:1 420:19
rigid 185:21 186:4
- rigor** 189:16
ring 151:7
rip-roaring 223:16
ripeness 225:11
rise 320:4
rising 43:13 351:19
risk 12:20 15:1 23:14
 23:18 158:3 162:8
 163:4 196:21 199:10
 199:11 255:8 267:6
 267:10 346:11
risks 267:20 410:7
risky 411:21
rivals 378:14
road 240:17 261:13
Robert 1:18 3:8 5:14
Roberts 104:12
Robin 2:2 4:6 37:13,16
 44:17,19 46:4 48:3
 270:16 300:10
Robinson 429:12
robot 30:15 36:22 65:5
 65:11,14,20 66:7,14
robot's 30:15
robotics 64:18 66:20,20
 67:1
robots 66:8
robust 142:16 177:5
 214:20 216:5 264:1
 321:8
Rocky 82:1
rode 285:10
rods 67:3
rogue's 260:2
role 103:8 104:11
 106:16 140:12 200:16
 200:22 244:10 367:9
 381:22 391:4 422:16
roles 96:15 97:16,19
 118:21,22
Romanette 204:5
Romanettes 204:5,13
romanticize 381:10
room 7:12 22:4 58:10
 60:17 150:21 263:16
 264:2 269:18 292:20
 338:7
root 199:17
rooted 82:18 175:6
 337:10
rough 50:2
roughly 324:16 396:12
round 322:1,22 370:15
roundtable 1:3,5,10
 6:10 8:8 9:7 10:1,6
 102:16 142:15 157:15
 161:16 192:1 199:3
 211:10 214:19 248:1

249:3
roundtables 176:10
route 33:15 235:8
 238:21
routes 246:5
routine 61:20 62:4,10
 62:20,22,22 64:7
 109:13 146:5 379:17
routinely 31:18 418:22
royalty 312:2,4
RPX 2:6 96:4,6 102:10
RSA 339:19
rubber 152:2 336:18
 337:6
rubber-tipped 151:17
Ruben 392:9
Rubin 2:22,22 5:8
 335:20,21 336:5
 344:7 345:15 346:2
 347:12 352:14 356:16
 361:10 365:4
rubric 203:12
rule 50:21,22 127:16,17
 127:17 151:10,10,15
 259:17,19
ruled 137:1 382:21
 414:14,15
rulemaking 241:20
rules 43:19 50:9 52:5
 53:7 57:11 118:6
 119:2 202:17 256:8
 261:13 326:8 366:10
 407:1,13
ruling 246:14
rulings 193:11,20 194:2
run 32:8 36:14 39:19
 179:21 196:21 217:4
 222:9
running 19:6 36:21
 247:5
rusted 398:6
rut 229:10

S

S&P 258:13 280:21
saddled 373:9
safe 373:1
Salvatierra 1:11
sample 221:3
Samuel 151:15
Samuels 2:18 5:3
 261:19,20 272:22
 274:17,19,22 278:4,7
 292:22 293:13 295:5
 295:12 296:4 300:8
 300:14 303:21 304:3
 306:3 413:16 425:1
sanction 407:21

sand 278:14
Santa 2:19
sarcasm 340:21
Sarnoff 383:2
sat 297:2
satisfied 174:10 182:7
satisfies 175:7 177:11
 189:15
satisfying 131:4
sauce 345:11 346:12
Sauer 2:15 4:21 210:20
 210:21 218:6 221:17
 226:22 228:13 235:4
 424:10
save 64:1
saves 63:2
saving 195:8
savings 146:15
saw 65:22 78:3 116:9
 239:14 240:10 257:18
 257:18 268:14 277:4
 277:6 289:13,18
 319:12 350:2 364:5
 375:15 423:14
saying 30:19 44:19
 62:2 121:17,20 123:4
 123:18 149:9 153:14
 256:15 257:10 282:19
 298:18 346:1,3 349:9
 350:3 352:6 356:13
 395:10 399:13 412:17
 424:10 428:21
says 34:20 73:9 76:6
 83:16 104:16 110:3
 113:15 117:4 128:19
 134:2 153:3 200:3
 216:10,12 257:3
 339:10 383:8 388:1,6
 388:7,10,12,17,22
 390:14 419:14 426:19
scaffolding 394:19
scalpels 398:8
scenarios 134:10
scene 165:9,21
schemes 43:12 74:8
Schmitt 2:11 4:16 164:7
 164:8,9
scholar 380:19
scholars 43:1 371:9
 382:3
school 2:2,19 327:21
 329:3
schools 54:9
science 39:2 43:11 60:6
 92:9 154:7 194:9,16
 198:18 218:13 234:22
 243:2,5 263:13
 327:18 337:12 352:19

386:20,21 392:14,18
 392:22 394:10,11
science's 13:2
sciences 14:5 17:21
 53:5 74:3 92:9 109:11
 114:10 193:18 194:21
 195:14,15 196:14
 211:17 213:18,19
 214:5 227:15 228:5
 231:7 232:3 234:10
 239:10 289:19 350:3
 352:15 353:8 356:17
scientific 46:14 209:9
 209:18 216:20 389:16
 393:20 412:6 421:3
scientists 336:17
scope 51:12 125:13
 181:7 194:10 196:9
 196:16 222:12 223:1
 230:4 235:11,15
 254:7 315:6,9 316:5
 321:10 350:14 402:17
score 59:11 220:9,11
scrappy 274:7
screen 165:10,13 166:3
se 11:16 289:10 372:17
 379:2 416:22
seagulls 366:1
search 62:16 63:12
 64:9 75:22 176:5
 327:13 338:22
searching 174:14
seashells 340:10
seated 7:8 21:14 307:6
seats 7:12
SEC 316:9
second 13:20 14:4
 18:18 29:21 34:1 40:6
 51:20 54:19 61:13
 69:7 81:11,12,13
 83:12 84:11,11 99:17
 110:22 112:14 144:6
 156:18 174:14,21
 175:9 181:13 198:1
 215:11 265:7,21
 307:7 309:10 330:10
 339:22 372:5 375:2
 427:16
secondary 42:7
secondly 64:5 92:15
 171:10 174:3
seconds 19:6 217:13
 305:17
secret 199:13 231:11
 231:15 243:18 244:3
 314:10 345:11 346:11
 356:2
Secretary 1:16

secrets 243:1,3,11,12
 243:22 244:8 355:6,9
 355:13 411:19 420:5
sections 41:16 55:6
 160:6 209:11 399:16
 400:18 401:21
sector 192:7 212:13
 351:2
sectors 191:12 193:15
 193:19 194:5 351:15
secure 311:21
securing 337:13 392:15
 392:20
security 316:13
security 250:3 405:6
seeing 8:18,21 49:21
 49:22 141:18 277:9
 280:1,19 287:20
 290:1 303:7 312:22
 351:14 353:17 391:9
 391:10 411:15
seek 97:6 115:17
 373:10
seeking 6:16 55:6
 177:8 260:8 272:18
seeks 117:21
seen 25:19 62:14 71:12
 85:4 120:15 121:8
 164:14 244:7 249:14
 259:2 265:13,18
 267:2,3 274:17,19
 288:13 289:5,6 291:5
 292:16 301:17 302:6
 351:18 364:18 369:7
 414:11 416:21 425:4
sees 105:19 106:4
seized 79:18
select 120:1
selection 280:10
self-referential 116:12
 116:18
selling 24:4 336:9
senate 158:5 386:14
 396:21
send 184:12
senior 135:15 308:11
 348:3
sense 46:13 76:10
 214:2,4 229:6,12
 234:15,17 238:17
 239:17 242:2 274:21
 283:4 288:3,10,11,18
 290:3 294:4 315:1
 393:17 409:11 414:7
 423:13,15
sensical 394:10
sensitive 225:4
sent 268:11,12

- sentence** 94:15 122:14
129:8 170:11 337:12
388:20 399:13
- sentences** 396:4
- separate** 27:17 97:19
181:1,16 242:8
301:16 303:21,22
417:17
- separately** 226:21
411:10
- separation** 103:13
- Sequenom** 110:13,15
111:8 194:22 200:10
207:6 210:2 421:9
- Sequenom's** 195:1
- series** 188:19 262:3
427:13
- serious** 193:11 225:19
241:1 244:4 294:15
356:20
- seriously** 166:14
- serve** 96:3 182:2
230:17 243:7
- served** 63:15 392:6
417:7
- server** 377:19,21
- serves** 182:3
- service** 90:2 335:2
- services** 26:15 41:18
148:8 245:15 282:8
305:6 403:18
- serving** 16:15 348:16
- session** 20:6 140:21
177:21 244:14 322:4
367:7
- set** 10:11 15:13 50:2
89:7,9 130:9 137:3
145:16 160:6 195:3
202:17 203:20 205:1
220:8 283:14 284:7
315:3 359:19 367:3
368:2 371:4 376:7
396:4,13 398:3
- sets** 129:13 159:10
203:11 397:20
- setting** 17:7 119:7
220:6 269:10
- settle** 361:19
- settled** 167:3
- settlement** 15:1,5 48:6
- settlements** 23:15
167:5
- seven** 18:14,14 19:1,17
137:22 166:22 336:15
342:18 367:14
- Seventy** 300:16
- severely** 27:9
- shade** 145:17
- shadow** 42:3
- shape** 64:21 291:12
- share** 43:6 53:8 113:8
164:13 242:15 270:19
357:17 380:16
- Shares** 258:6
- sharing** 56:19 429:6
- Sharon** 2:10 4:16 157:7
157:9 185:13 311:8
346:13
- sharp** 157:19 398:7
- Shaw** 429:12
- shed** 82:12
- shell** 104:5
- Sheridan** 394:1
- Sheridan's** 393:10
- Sherman** 238:16
- shift** 95:15 276:9
- shifted** 96:20 101:5
314:9 343:14
- shifting** 243:20
- shifts** 315:9
- Shira** 1:11,14 8:3 10:3
17:13 122:10
- shirts** 7:14
- shoot** 278:2
- short** 43:14 84:17 125:3
154:4 346:12 374:9
375:7
- shorter** 294:13 358:18
359:10
- show** 37:5,6 107:20
156:10 171:8 173:2
287:20 299:2 314:6
351:7
- showed** 266:15
- showing** 69:22 291:4
- shown** 36:5,8 80:16
110:5 162:16 199:3
200:9 208:8 408:6
- shows** 321:12
- shrift** 154:4
- shy** 111:5 390:9
- Sibelius** 104:14
- side** 59:12 125:6,22
143:12 227:18 228:5
273:20 274:14 284:9
289:18,18 297:15
343:19,20 347:16
353:13 403:3 415:11
- sides** 41:1 273:2 279:7
- sieve** 91:4
- signatory** 295:15
- signed** 230:8
- significance** 339:4
- significant** 61:6 98:11
119:12 139:18 173:22
193:6 212:1 246:8
248:14,18,22 256:18
257:6,8 258:7 310:11
310:16 340:15,18
377:13 391:19 405:3
405:10 408:3
- significantly** 12:10
13:21 24:18 34:1 40:7
87:9,10 99:19 128:11
137:15 145:15,22
146:8 147:15,21
174:21 208:11,14
209:1 294:13 334:8
340:11 342:6,8 358:5
- signs** 395:9 396:2,6
- Silicon** 18:2 29:18
42:22 52:20,22 70:9
71:22 164:10 166:20
335:21 345:8
- silver** 70:16 186:15
- similar** 59:18 84:3
117:11 120:2 121:16
148:12 209:18 210:5
214:4 299:12 317:14
326:2 379:10 391:13
392:9 394:21 399:11
- similarities** 209:19
- similarly** 102:4
- simple** 50:16,21,22
59:7 91:19 92:12
140:14 141:2 153:7
201:15 238:18 325:18
342:9,11 384:4
399:13,18 400:1
408:1
- simpler** 118:8
- simplifies** 299:15
- simplify** 117:12
- simply** 13:22 24:22
25:4,5 27:21 28:10
31:6 36:19 105:10
151:1 156:22 167:11
215:12 220:6 225:21
226:18 232:20 233:3
240:20 283:21 310:14
313:20 393:19 394:4
397:2 406:3
- Simultaneous** 133:11
- single** 100:17 154:10
305:19 315:16 344:10
- Singularity** 2:1
- sir** 80:5 81:18
- sit** 42:22
- sitting** 288:18 297:7
363:2
- situated** 428:7
- situation** 72:7 73:9
126:21,22 164:21
267:15 355:17 382:4
- situations** 98:10 178:6
272:17
- six** 12:8 18:14 245:10
307:1
- size** 287:13 294:1,18
412:17 413:7 426:1
- sized** 266:5
- sizes** 191:12
- skeptical** 410:1
- skepticism** 222:1 367:8
- sketch** 104:4
- skill** 54:13 99:20 176:14
184:16 393:15
- slavishly** 110:6
- sleep** 328:14
- slice** 316:17
- slides** 30:19 80:17
143:13 170:3,9
187:10,16 240:9
336:19 351:6 380:14
422:1
- slightly** 75:15 299:14
379:1
- slips** 173:1
- slouch** 151:16
- slow** 38:2 256:21 333:6
- slowed** 344:6
- slowly** 320:16
- smack** 179:21
- small** 27:12 42:22 43:3
69:4,20 70:7 97:5
107:18 125:5 180:9
242:5 245:13 250:8,8
251:4 262:6,11,21
264:8 265:12,16,21
265:21 266:5 267:6
268:5 269:3 270:13
274:1,7 278:19
279:13 281:1 297:12
298:9 300:5 304:21
307:14 310:1 322:10
322:11 323:22 324:5
324:15,17,20 325:5
326:18,22 327:1
358:3 362:16 425:1
426:1,9,17
- smaller** 259:3,9 304:14
305:9
- smart** 58:7,7 233:15
234:3
- smartphone** 398:16
- smooth** 206:20
- so-called** 13:16
- Sobon** 3:11,11 5:17
392:2,3 413:20
418:17 419:5 425:4
426:5
- social** 56:19 230:10

236:8 269:10 428:11
society 286:21 407:14
software's 46:10
software-based 30:12
software-related
 195:22
sole 312:8
solely 179:3 310:22
solicit 323:1 326:17
soliciting 322:2 323:4
Solicitor 17:20 244:21
Solicitor's 17:20
solid 310:6
solution 73:16 83:5,6
 85:21 86:4,12 88:2,13
 90:2 116:14 118:9,10
 118:13,16 131:9
 136:5 200:8,12,19
 201:20 214:6 241:17
 241:18 242:1 252:15
 252:21 253:11,21
 254:20 275:11 277:19
 287:7,13 298:21
 311:7 341:4,5 347:13
 360:9,10 406:11
 408:10,19 422:13
 423:5,6
solutions 89:19 163:17
 186:12,14 251:15
 269:13 282:2,7 295:4
 311:6 361:8
solve 116:18 117:21
 130:20 131:5 225:12
 241:12 282:13 347:19
 390:18 421:21 428:2
solved 386:8
solves 118:4
solving 119:14 200:14
somebody 90:5 108:21
 132:13 180:7,8 216:8
 224:18 283:20 304:6
 357:11
something's 62:2 75:10
 410:4
somewhat 54:5 56:18
 57:14 207:18,20
 210:7 233:4 361:19
sooner 263:19,20
 412:20
sophisticated 237:13
 413:5
sorry 8:9 21:12 22:2
 52:14 61:10 83:11,12
 89:6 112:14 133:10
 157:1 178:9 185:13
 186:16 346:2 348:21
 402:4 426:5
sort 57:15 59:4,17

60:11,13,20 62:5,7
 63:6 64:2,6 69:3,5,10
 73:12,19 76:14 79:2
 79:10 94:9 106:8
 122:5 123:21 124:1
 129:5 133:17,21
 166:7 183:9 188:12
 188:15 202:15 203:8
 204:19 218:10,12
 219:22 221:13,14
 223:10 224:22 227:13
 234:17,18 236:19
 238:15,18 239:16
 249:5 256:5 279:6
 287:11 292:14 299:11
 304:12 305:3 321:1
 322:13 326:6,7
 327:12,19 346:18
 361:18 362:5 363:19
 366:10 412:4 419:5
 419:17 420:16 427:14
 427:16
sorts 419:1
sought 116:14
sound 35:14 135:3
 391:13
sounded 305:19
sounding 62:7
sounds 62:10 272:7
 274:5 415:10 417:10
 423:9
source 84:11,12 100:17
 251:3 275:21 363:18
 386:2 428:10
space 17:9 77:3 228:8
 239:6 243:5 245:15
 249:11 255:9 262:7
 264:15 274:8 275:7
 289:21 302:20 320:9
spaces 396:2
spark 155:2
spate 111:3
spawned 137:15
speak 7:3 19:1 37:19
 104:8 112:19 113:6
 150:1 169:19 197:22
 211:4 219:5 224:22
 231:20 263:14 307:12
 327:3 336:20 346:14
 357:19 360:7 400:8
 416:4
speaker 18:22 19:16
 21:14 29:11 37:12
 57:19 81:13 90:10
 95:19 112:13 134:22
 142:20 143:2 164:7
 197:18 408:21
speakers 18:14 19:3,5

115:4 208:2
speaking 8:1 21:1 96:5
 124:9 133:11 184:22
 297:6 354:15 366:22
 413:21
speaks 308:13
spec 173:13 178:13
 363:16
special 32:19 33:10
specific 30:7 34:22
 44:18 49:3,14 52:7,9
 62:16 68:9,11 93:10
 94:3 99:2 121:11
 126:11 147:19 161:7
 163:17 178:16 185:15
 193:22 196:13 198:13
 198:17 202:4,13,17
 203:1,21 209:11
 210:16 220:8 223:21
 223:22 226:4 232:19
 237:3 239:18 240:3
 269:4 289:2 372:16
 373:22 405:5 414:17
 414:22
specifically 28:9 36:3
 93:5 129:8,13 136:5
 136:11 191:22 209:10
 230:22 237:17 371:18
 386:19 396:6 416:4
specification 28:4
 85:12 87:14 89:21
 92:18 93:1,3 94:5
 116:7,22 117:7,21
 121:21 161:9 178:17
 190:10,13 288:14
 363:17
specifications 89:14
 178:11 363:16
specificity 35:21
 126:14 180:16 220:13
 233:6
specifics 198:5 402:18
spectator 96:6
spectrum 206:3 329:15
speech 332:12
speed 282:10 322:8
 334:10,20 347:7
 358:6 361:10
spelled 281:8
spend 48:1 62:15 77:9
 77:11 96:8 138:4
 189:9 259:20 273:5
 325:12 378:12 381:5
 414:4
spending 58:18 61:6
 309:16 322:21 323:10
 323:11
spends 63:6,10

spent 63:19,20 174:1
 186:11 309:5,7
 323:12,13 414:3
spiffs 348:15
spilling 346:11
spirit 37:21 127:17
 280:5 322:1
spite 367:7
split 98:21
splits 270:6
spoken 103:18 296:12
 328:5 332:21 333:6
 334:11 377:9 383:5
sporadically 105:19
spot 185:13 404:1
spreadsheet 36:16
Spring 370:12
spurious 251:7
spurred 212:11
square 224:17
squarely 14:9
squares 101:21
Squire 2:8 113:1,6
stabilize 399:9
stabilizing 214:3
stable 214:6 416:11
Stack 425:22 426:3
staff 58:15
stage 10:11 48:18
 98:15 137:3 168:4
 169:7 242:12 399:1
 415:11 424:22 425:12
stages 205:14
stake 139:21 248:18
staked 158:13
stakeholder 7:8 170:13
stakeholders 6:6 197:5
 413:14,15
stand 97:13 181:20
 276:14 334:22 391:3
 397:8 422:10
standard 47:14 94:22
 95:7 108:8 161:1
 183:7 194:17 195:9
 248:20 253:18 277:21
 282:15 283:5 288:1
 289:12 290:7,11,12
 291:4,17 292:1
 298:10 360:15 370:6
 371:14,16 397:15
standards 50:2 95:4
 215:16 276:21 280:12
 283:14 284:1,7
 293:15 299:12,19
 311:8,9,11 353:15
 355:1,12 360:6 371:3
 397:16
standing 127:7 348:13

- standpoint** 276:15
334:1 385:13
- Stanford** 1:11,11 2:2
6:7 21:15 44:13,13
90:11
- start** 19:14 22:2,12
64:16 72:2 112:18
134:15 170:11,12
187:14 200:22 218:7
218:10 220:12 234:7
272:11 299:20 329:20
334:6 337:2 343:10
366:21 422:18 423:2
- started** 17:10 47:6
69:18,21 218:12
240:17 245:2 271:16
318:11 320:4 322:12
358:8,9 423:12
- starting** 12:13 45:20
144:17 213:3 277:13
291:3,11 307:8
313:13 337:10 377:17
- starts** 240:12 244:2
331:1
- startup** 70:19 72:16
262:21 265:21 283:10
284:12 296:1 315:20
327:1 332:17
- startups** 43:3 69:4 70:1
262:6,9 266:7,12,13
266:16 269:4 301:1,9
303:5 336:7
- state** 16:13 56:15
108:16 113:4 119:16
137:1,13 169:15
170:18 171:2 187:10
191:13 206:11 219:17
219:19 313:13 350:11
404:14 405:20
- stated** 30:17 58:5
157:14 184:18 386:21
416:18
- stately** 124:2
- statement** 75:16 236:12
253:6 261:2 370:13
373:20 385:5,6 388:8
397:2
- statements** 105:17
383:14
- states** 27:3 81:14
144:19 150:10 159:16
162:8,10 163:3
212:20 217:7,10,16
227:11 230:8 238:13
266:17 307:22 400:10
401:4 418:6
- stating** 55:12,12,13
119:15
- statistics** 56:3 173:2,7
300:6 309:11
- status** 257:7
- statute** 93:14 126:16
130:8 140:3,6 141:6
144:18 145:3,5
199:21 201:1,4,15
208:4 234:17 240:4,5
241:18 287:14 308:5
311:6 368:19 369:4
372:10 397:17 416:21
417:13 421:21
- statutorily** 367:17
370:7
- statutory** 10:16,20 11:7
55:5 94:7 105:22
142:2 158:9,13
239:18,19 308:19
337:20 368:5 369:1
370:5 372:4,7 381:8
385:16 397:10 400:17
401:21 422:4
- stay** 19:3 325:3 337:4
- staying** 236:13 280:11
307:11
- steady** 320:11
- stealing** 266:2
- steel** 337:7
- steer** 176:1,21
- step** 13:16 31:2 33:19
34:2,21 38:9 40:10,17
50:19 69:12 70:22
76:8,16 99:17 100:7
109:12 115:4 117:12
117:15 118:1,7 127:5
162:1,13 221:4,5,20
240:7 284:5 289:22
290:5 329:2 341:12
341:14 342:11 359:2
407:8,9
- steps** 15:18 93:10
146:19 147:20 188:19
329:18 339:6 341:21
379:17
- Steve** 2:6,9 4:11,15
95:20 96:2 143:2
176:10
- Stevens'** 373:8 411:4
423:18
- sticky** 240:12
- stifle** 142:12
- stock** 316:11
- stood** 68:18
- stop** 242:21 331:7
- stopped** 310:20,22
422:1
- store** 153:22 154:15
178:22 179:5,10
- storehouse** 286:10
- stories** 288:17
- storing** 24:10 87:6
116:16
- storm** 322:14 328:8
364:11
- story** 304:13
- straightforward** 158:10
- strand** 150:12,18
- strategic** 303:9
- strategies** 96:21
- strategist** 405:13
- strategize** 420:13
- strategy** 3:8 43:18
172:22
- strawberries** 55:18
- streamlined** 349:5
- Street** 56:15 137:1,14
137:17,18
- strength** 192:15 332:12
- strengthening** 9:15
- stretched** 175:14
- strides** 127:2
- strike** 280:18
- stringent** 108:2
- strong** 192:9,16 193:7
196:11,20 199:4
353:2 364:16 368:4
399:3
- stronger** 67:6 267:3
- strongly** 67:13,16
352:21
- struck** 116:7 120:13
276:6 382:2
- structure** 108:16 190:4
190:10,12
- structured** 75:17
- structureless** 190:2
- struggle** 61:12 417:19
- struggled** 11:12 188:16
204:7
- struggles** 404:2
- struggling** 213:20
223:20 331:3 359:7
- stuck** 410:3,4
- students** 60:20 337:1
- studied** 386:10 416:3
- studies** 131:16 192:8
- studio** 292:21
- studios** 293:3
- study** 107:17 131:22
164:13 300:21 301:4
301:12 421:8
- stuff** 66:11 76:19
270:19 379:18
- stumble** 133:21
- Su** 2:3 4:7 52:16,17,18
52:19 57:18 66:17,19
- 69:8 72:18 78:11
174:16
- subjection** 248:19
- subjective** 118:3,5
148:19
- submission** 242:5
- submissions** 260:20
- submit** 7:11,16 192:3
425:2
- submitted** 81:8 198:10
- subsequent** 194:13
- subsequently** 305:11
- subset** 250:8
- substance** 24:19 127:8
251:19
- substances** 212:8,17
213:8
- substantial** 12:12 31:4
- substantially** 194:19
396:4
- substantive** 126:3,16
211:18 215:6 344:15
397:6
- substantively** 370:3
- substitute** 122:18
236:12 344:22 370:22
- succeed** 9:12
- success** 193:8 254:1,2
358:2 359:6,15 360:3
401:4
- successful** 38:17
184:13 233:17
- sucks** 328:16 330:21
- sudden** 22:21 333:9
- suddenly** 137:18
304:22
- sued** 274:15
- suffer** 227:10
- suffice** 368:6
- sufficed** 394:20
- sufficiency** 189:6
- sufficient** 35:20 251:18
347:11
- sufficiently** 34:13 125:8
393:7
- suggest** 19:21 41:10
203:4 218:12 260:21
368:12 399:11 413:9
- suggested** 165:18
371:9
- suggesting** 104:6 120:3
- suggestion** 122:13
128:18 201:5 269:5
272:13
- suggestions** 144:15
186:18,19 187:5
- suggests** 367:13
- sui** 242:8

suing 279:13
suit 259:13,21 268:14
 407:8 420:20
suits 266:6 335:14
 382:14
sum 16:12 149:9
summarize 340:19
summarized 383:12
summary 168:8,14,15
 259:20 325:19 326:15
 374:2
summed 40:16
sun 337:21 396:20
super 292:5 395:5
superficial 201:14
Superior 111:3
superiority 390:10
supervising 348:3
supervisors 25:15
 348:2
supplementary 242:7
supplemented 11:4
supplied 80:10
support 15:19 94:4
 102:11 110:14 140:2
 141:5 191:17 206:3
 224:15 272:2 309:2
 408:18 410:16
supported 92:22
 191:16 255:4
supporting 162:15
 404:4
supportive 281:5
supports 140:13 385:6
supposed 32:7,18,20
 33:21 34:2 69:4
 103:14,15 332:4
suppress 160:11
surgical 415:17
surprise 207:18 211:15
surprised 357:2
surrounding 105:12
surveyed 300:15
survive 328:8 396:8
surviving 49:16
susceptible 97:1
suspect 69:15
suspense 367:18
sustain 408:5
sustained 211:6 409:12
Sutton 2:12 4:17
 169:22 170:1 184:9
 186:17 187:4
swamp 426:17
swath 400:20
sweep 49:5 64:6 408:9
sweeping 195:3 213:21
swing 204:3

swiped 246:1
switched 67:21
Symbol 196:6
symposium 150:2
synonym 371:12
synthesis 134:8
synthesized 60:2 61:22
synthesizing 58:22
synthetically 14:17
systematic 127:22
systemic 227:4
systems 82:19 162:9
 163:2,5 192:14
 237:14 393:20 408:2
 412:1 418:18

T

table 4:1 116:12 117:1
 288:19 306:10 322:1
 370:15
tables 322:22
tail 43:22
tailored 92:20 203:21
takeaways 89:1
Takeda 7:13
taken 15:19 79:8 111:9
 147:20 169:1 204:3
 226:6 368:11 385:6
takes 226:9 276:19
 343:19
taketh 108:5
talk 62:19 82:20 84:1
 86:1 87:1 103:7 144:2
 144:12 165:3 198:6
 198:21 265:20 271:1
 274:13 297:11 308:6
 314:14 328:10,22
 337:9 362:17 375:8
 381:18 386:4 411:10
 425:3
talked 36:16 48:4 53:7
 56:12 69:8 78:11,16
 82:2 83:17 87:17
 109:20 131:12,16
 188:11 201:2 202:13
 222:14 233:5 242:22
 265:15 271:2 300:15
 350:19 382:20 383:22
 384:10 387:11 422:2
talking 35:22 83:14
 109:4 116:21 143:10
 143:14 155:5 188:14
 199:7 219:7 234:5
 235:6,6 241:16 245:9
 266:19 269:11 272:16
 280:20 288:6 293:14
 297:4 303:2 413:16
 418:10

talks 386:14,19
tandem 28:14
tangential 176:4
tangible 162:17 338:7
tango 40:10
Tangri 44:14
tapped 246:1
target 70:1 137:19,21
targeted 259:4 313:16
targeting 251:3
targets 266:5
task 58:4 59:4 163:9,12
 186:11
taught 54:9 393:13
 394:17
tax 155:22 251:13
Taxol 132:8
Taylor 429:13
TC 25:13 80:20
tea 41:9
teach 44:13
teacher 61:1
team 102:11 248:7
 332:8 429:8
tease 314:22
teasing 351:16
tech 43:11 53:11 54:10
 74:2,18 97:3 225:16
 256:1 270:8 271:19
 320:17,19 321:16
 327:14
technae 393:18 395:2
technical 22:3 54:1
 57:12 73:2,16 79:4,6
 79:14,19 83:5,6 99:16
 106:11 121:7,14,18
 126:7 137:16 149:11
 161:2 170:15 171:8
 171:13 173:10 174:7
 174:9 175:3,7,13
 176:6,16,19 177:7,10
 177:14 184:20 185:7
 185:7 251:11,15
 252:15,15,21 253:10
 253:21,22 254:5,15
 254:20,21 275:10
 277:19,19 282:2,3,6
 287:6,7,12,16 288:2,9
 288:22 289:12 290:7
 292:11 298:21 299:2
 303:17,19 304:9
 359:22 362:8 394:2
 416:7,7,17 417:10,14
technically 232:16
technique 165:8
techniques 12:21
 249:19
technological 47:5,7

51:2,3 85:21,21 86:12
 88:2,13 90:2,3 92:13
 92:17 93:3 118:10
 120:9,10,22 121:3
 216:22 221:13 236:7
 236:19 250:1 252:2
 269:12,13 293:8
 295:3 298:20 299:1
 371:1,2,12 373:7
 375:18 380:4 381:12
 381:15 390:9 402:12
 409:2 410:9,10
 412:14 414:7 419:13
 424:8
technologically 375:21
technologies 15:11
 140:9 146:18 166:21
 187:20 192:18 195:14
 199:9 218:15 219:1
 232:5,9 273:18
 317:12,19 404:20
technologists 267:19
 269:9
technology 16:3 33:6
 49:3,15 51:8 52:8,9
 66:21 84:6 114:12
 115:18,22 116:19,22
 117:19 118:13,14,17
 130:17,20 131:5,7,9
 144:10 146:4,9,12,16
 146:22 147:16,18
 148:4,8 149:15
 162:12,19 175:7
 178:12 193:15,19
 195:16,21 196:15
 206:6 216:20 217:8
 229:19 230:9 232:11
 236:15,22 237:16
 245:13 247:2,4,5
 250:2,16 251:1 252:2
 253:1,5 267:19
 273:10 283:9 284:15
 294:14 298:9 299:1
 317:14 320:8 330:13
 334:10 340:4 344:4
 376:6,9,10 377:5
 379:9 393:18,22
 394:4 403:16 404:1
 407:12 409:10,19
 412:15 414:11 419:11
 424:9,11 425:19
 426:15
tectonic 23:21
tedious 117:22
Telegraph 395:3
telegraphic 396:5
telegraphy 383:17
 396:7

tell 19:2 152:12 153:17
185:21 304:13 310:3
327:8 338:16 348:2
390:3
telling 110:18 111:5
tells 150:19,20 154:19
186:8 208:6 391:7
temptation 44:2
tempting 70:18
ten 18:17 134:14 150:9
159:6 173:5 216:5
220:6 233:20 264:17
266:7 306:21 362:4,4
362:10 364:5 403:19
404:20
tend 126:1 148:5 259:8
262:11 302:13 380:19
381:10 426:13
tendency 110:5
tends 302:18
tens 323:21 426:14
tension 274:21 276:4
278:15 279:6
tenure 9:10
term 43:18 121:7 146:8
151:21 172:7 344:6
385:16 395:19 412:11
412:22 424:8
terms 46:19 52:3 70:13
73:10,11 84:4 86:15
87:7,14 188:14
194:18 233:12 234:13
241:3,5 244:5,6
253:18 259:1 276:18
278:2 286:3,12
288:16 299:20 314:15
314:22 316:15 321:4
321:10 323:9,19
326:12 357:2,6 362:1
378:8 381:7,8 394:5
terrible 333:11
terribly 47:13 189:8
378:15
test 12:15,15,16 13:13
13:17 14:1,21 15:10
24:17 34:2 44:21
50:19 58:3 61:13 64:3
75:18 91:17 92:2 95:5
105:22 108:3 110:1
114:21 115:5,8,18,21
117:16 120:3,9 123:8
123:9 127:3,6 134:10
136:9 137:7 140:14
141:6,10,15,16 144:6
145:9,16 146:8
148:19 162:5 186:4
216:17 220:7,20
228:3,8 243:15 252:6

252:8,21 253:3 255:2
282:1 289:22 290:6
314:21 315:4 340:8
368:2,16 372:3 374:5
400:14 407:6,8 409:1
409:10 410:9,10,16
411:2 414:18,18
415:7,8 416:7
tested 124:14
testified 74:6 158:5
testimony 171:22
testing 71:16 213:9
363:10
tests 24:20 28:14 77:18
141:14 185:17,21,22
207:9 217:3 228:10
315:18 374:7
tethered 202:16
Texas 135:17 307:8
text 201:4 338:3
thank 112:18
thanks 17:5,6,7 37:8
52:14 102:20,21
177:18 255:14 361:9
429:5,14
thematically 293:17
theme 93:2 230:12
theories 138:5 209:9
213:17 222:5
theory 329:4
therapies 313:16
thereof 25:1 93:17
208:10
thin 288:14
things 26:21 30:1 31:21
32:2 35:19 60:11 62:9
62:17 65:14 67:17,22
70:12 79:6,7 88:8
123:5 126:20 129:14
129:18 132:3 133:16
143:17 144:1,4
146:10 147:14,18
152:18 181:10 183:15
183:16,21 186:19,20
187:9 203:6,13,19
204:14,18 234:4,20
235:9 236:1 237:17
243:5 262:4 270:22
273:12 276:9,12
279:17 282:11 288:20
297:5 299:15 303:13
303:22 304:9 314:8
314:12,16,17 329:21
330:16 331:7 332:16
332:20 333:2,4
334:14 338:5 343:14
347:15 352:3 361:18
363:19 365:9,20

366:4 375:7 379:5
380:2,19 382:17
387:14 391:5 392:16
410:1,8 411:20
413:11,21 417:1
418:2 419:1,12
426:22
thinks 111:6 125:18
422:5
third 26:13 56:6 85:9
87:17 134:15,22
182:3 190:21 215:18
330:14 340:16 360:1
372:8 392:1
Thirdly 171:13 174:8
Thomas 1:21 2:3 4:5
21:16,17,19,22 22:1,5
22:10,13,16 29:5,9
80:4,7 81:3,6 105:7
Thompson 309:6
thorough 168:10
thought 22:18 56:8
68:18 120:8 129:16
141:20 186:1 187:1
201:12 208:20 233:9
238:8 241:22 243:8
248:22 280:9 315:6
363:3 382:15 405:12
409:8 410:17 429:4
thoughtful 225:7
thoughts 124:21
234:12 290:8,17
409:5
thousand 248:14
255:21 301:2
thousands 58:14
206:10 213:4 323:21
349:2,3 426:14
threat 139:18 262:16
threaten 193:21
threats 265:18 301:10
three 18:21 53:8 62:9
100:2 165:9 187:9,13
191:11 233:19 268:5
301:12 320:21 322:18
340:16 341:21 342:11
348:13 381:5
threshold 11:3 138:1
162:4 171:4,18,21
172:9 177:2 184:6
374:7 400:1
threw 279:21
throw 281:2 409:3
428:4
throwing 195:17 402:16
thrown 105:2 203:9
thrust 131:2
thrusting 136:1

thunder 266:3
tied 107:3 147:18
239:18 310:13
tier 427:17
times 9:9 11:12 12:1
38:12 58:14 59:2 79:9
133:18 166:17 233:13
268:2 310:7 327:20
337:17 340:15 353:12
386:11 414:15
tiny 274:4
tired 39:10,11,13
375:10
tissue 274:10
title 238:10 239:22
397:5,22
TLI 50:14 131:3
today 6:16 7:6 8:10
10:13 12:5 16:12,17
17:7,12 20:16,22 21:1
67:14 96:5 103:7
143:10 144:12 163:17
164:12,17 165:3
169:11,19 173:19
179:6 197:16 198:6
198:22 211:5 217:9
222:3 224:13 239:2
247:6 262:2,19
263:14 267:20 271:3
271:18 275:6 289:13
290:9 293:15 307:13
307:18 308:6 311:16
312:14 314:6 322:11
329:10 332:22 333:14
334:11 335:20 336:1
336:21 337:10 340:12
341:3 343:16 362:15
365:6 367:7 376:6
382:12 385:18 386:17
398:12,21 400:8
402:13 406:8 412:9
414:11 417:12 422:8
425:7
today's 6:10 7:2 9:13
10:6 15:16 17:1 67:11
141:9 192:1 214:19
312:16 370:15
token 12:22
told 47:8 154:12
Tom 244:21
ton 334:13
Tony 423:22
tool 35:4 36:6 64:6,10
164:19 165:1 169:3
183:8 201:3 223:7,15
265:17 268:18 293:10
365:11
tools 35:7 47:14 114:4

175:22 176:2 187:21
187:22 392:19
top 25:10 150:9 232:18
404:20
topic 9:8 16:21 53:3
150:1 176:9 192:4
211:8,20 248:2 269:3
291:9 352:20
topics 260:10
topology 377:21
Torah 155:9
total 119:20 167:1
totally 24:17 342:12
touch 240:14
touched 250:7 394:22
touchstone 385:19
tough 232:12 275:12,13
332:16,16
track 89:6 336:13 358:4
358:4,15,17 359:12
359:15 360:3,4
361:11
tracking 99:7
tractable 117:17
trade 20:10 26:12,14,19
42:11 80:22 81:10
199:13 231:11,14
243:1,3,10,12,18,22
244:3,8 314:9 340:10
355:6,9,13 356:2
393:14 411:19 420:5
traded 42:8 258:2
trademark 1:1,16,17
81:14 191:22 197:4
330:4 349:15 429:8
trademarks 420:6
tradeoffs 186:2
tradition 37:21 155:7
424:16
traditional 52:5 196:1
216:18 244:10 366:10
382:10
traditionally 97:19
229:18
traffic 82:21 84:7
train 149:13
trained 348:7 419:11
training 6:15 326:10
347:20
trajectory 38:2,10
39:22
transaction 246:6
316:11,17
transactions 15:2
82:22 314:7 316:8,10
316:16 317:3 321:5,6
350:14
transcribed 7:2

transform 15:6 145:12
transformation 12:15
38:21 414:18
transformed 392:19
transgenic 218:17
transistors 35:17
414:12
transition 349:20
translated 371:11
transmitting 24:11
transparency 349:12
trapped 332:19
treacherous 39:18
treat 132:15
treated 204:15 234:1
311:5
treating 294:7
treatise 394:5
treatment 13:5 213:13
383:8
tree 132:9,14
trees 132:12
tremendous 95:3
358:15,17 359:14
429:3
tremendously 359:5
trend 27:20 244:7
409:13
trending 376:16 377:7
triad 114:16
trial 101:14 157:21
167:8,13
tried 38:9 89:5 105:15
119:10 229:10 314:21
316:14 317:4 375:15
391:20 414:8 415:6
trillion 193:2 311:3
trips 162:10 163:4
182:16 183:2 230:7
293:16 294:6,9 295:3
295:7,15 424:10
troll 246:18 266:4,6
270:12 301:10,15
303:8 331:2 428:3
Trolling 330:21
trolls 281:17 331:10
347:14 382:14
trouble 379:13
troubling 194:17
399:21
truck 292:10
true 71:21,22 95:15
210:5 212:13 339:13
truly 195:1 326:22
413:5 415:13
Trump 26:22
truncation 320:7
truth 311:19 416:14

try 59:17 60:11 61:8
79:2 105:6 106:1
168:3 188:6 232:1
234:15,15 235:1
277:7 331:5 336:15
344:19,21 352:5
353:14 375:7 381:16
413:16 415:18 421:1
trying 45:22 63:9 68:3
95:4 122:1 123:3
127:2 129:22 130:1
130:20 131:5 140:22
152:1 167:8 184:12
204:3 228:13 230:4
232:13,19 236:21
295:19 313:15 314:22
315:13 323:4 328:8
333:14,21 359:9
362:1 380:20 386:11
398:14
Tucker 301:5
tumultuous 158:7
tune 232:14
turn 16:22 21:5 36:4
143:1 161:7 176:22
215:18 260:10 375:2
392:1 399:3
turned 47:12 75:7 209:1
Turning 114:15
turns 19:10,12 155:18
156:13,15 296:12
twenty 309:12
twice 74:7
twins 151:2
two 4:9 15:8 18:17,18
22:14,16 25:11,11
27:2,5 41:14 45:7
55:5 64:1 67:17,20
68:7 70:5 76:8 86:18
92:1,3 94:12 114:18
124:11 142:7 153:19
165:7,10 186:11
188:1,2,8 196:17
201:10 233:16 235:4
237:11 239:3 252:10
262:19 264:19 267:5
271:13 272:12 274:10
275:1 279:6 289:22
290:5,13,15,16
295:14 301:12,16
303:22 313:3 314:21
321:17 336:11 340:15
368:2,11,16 369:7
372:2 374:4 406:15
407:8 408:22 415:7
426:20,22
two- 40:9 50:18 92:1
two-part 58:3 91:17

136:9 144:6 216:17
two-prong 145:16
two-pronged 145:9
two-step 13:13 14:21
24:17 40:2 182:18
two-thirds 193:5
two-year-old 151:2
type 115:1 148:16
225:7 317:20 318:9
397:2 406:20 410:9
410:10,16 411:22
421:9 422:22
types 119:1 147:1
173:8 199:13 205:2
225:18 269:12 273:6
273:7 276:1 294:13
313:16 314:21 315:8
315:10 405:8 424:4
typical 162:5 222:7
typically 54:8 160:22

U

U.K 206:5
U.S 1:1,15,17 2:13 6:18
56:9 73:18 139:21
142:5,6 157:13
162:21 164:1 191:5,9
191:20,21 192:21
197:3,12 207:13
209:21 210:3,7
214:15,15 217:17,20
218:2 231:8 245:11
247:22 254:2,10
255:1 277:15 280:5
280:11 281:12,21
282:17 284:6 289:9
289:16 290:5 291:10
296:7 299:7,18
U.S.'s 193:14
ultimate 221:9 407:15
ultimately 63:13 94:7
142:11 155:3 167:14
168:10 200:19 202:9
220:14 231:16 234:6
244:3 246:21 361:13
382:21 427:13 428:9
Ultramercial 99:1
unacceptable 206:11
unaltered 11:8
unambiguous 372:4
unapologetically
400:13
unaware 387:6
uncertain 48:13 404:14
uncertainty 157:22
161:4 252:5 255:8
378:19 379:4 400:18
403:5

unchanged 11:1
unchartered 162:20
unchecked 139:14
unclear 101:8 370:5
unconventional 85:20
 146:6,19
undefined 24:17
undeniably 135:22
under-correcting 228:2
underexplored 387:17
undergo 14:14
underline 236:15
underlying 209:4
 215:19 265:10 268:17
 373:3
undermines 401:3
 404:12
undermining 193:13
 286:20 403:11
underpinning 100:20
 184:17
underscored 397:14
Undersecretary 7:21
understand 44:20 46:1
 53:16 58:12 60:11
 70:21 80:8 95:4
 105:20 107:2 110:9
 110:14 115:17 127:3
 178:19 222:3 250:14
 260:11 273:22 277:14
 294:1 306:1 323:5
 357:14 386:11 393:9
 419:6 426:15
understanding 23:18
 61:16 116:6 208:17
 228:22 273:6,8
 277:11 329:13 393:21
 416:16 424:13
understands 105:18
 112:7 223:1 236:3
 288:4 304:7
understood 54:9,12
 61:19 62:4,9,19 78:4
 109:14 229:18 355:20
 403:9 414:9
undertake 115:7
underway 254:22 255:5
Underweiser 3:12 5:18
 400:6,7 416:2
undo 260:9 399:20
 415:21
undoubtedly 257:14
 258:18
unevenness 360:5
unexplained 378:1
unfairly 280:14
unforeseen 141:17
unfortunately 80:13

103:17 212:18 270:17
 362:2 369:10 398:5
uniform 299:20
unimagined 11:10
unintended 241:10
 391:17,19
union 79:5 313:13
unique 210:11 329:19
unit 25:14 80:17 173:15
 175:19,21,22 176:7
 177:12,16 187:21
 273:11 348:5
United 27:3 81:14 150:9
 159:16 162:7 163:3
 212:20 217:6,10,16
 227:11 230:7 238:13
 266:17 307:22 400:9
 401:4 418:5
units 25:20 97:4 171:14
 173:4 175:19,20
 176:2 187:20 188:1,8
 309:13 311:13 359:17
 359:17,18
universally 71:21
universe 236:1
University 1:11 2:2,4
 2:19 3:10 37:17
 351:10
unjustly 27:6,7
unknowable 97:4
unknown 214:17
unlevel 324:14
unlock 404:21
unnecessarily 25:3
 174:16
unobvious 24:22 27:21
 27:22 415:14
unpack 29:19
unpatentability 213:6
unpatentable 23:9
 49:22 108:2 160:4
 389:18 399:16
unpopular 201:21
unpredictable 206:14
unquestionably 15:14
unrest 335:15
unsatisfying 48:15
unsuccessful 39:19
unsupportable 196:19
untethered 152:22
 240:3 325:11
untouched 249:22
untutored 152:14
unusual 39:15 41:20
unwilling 200:9
unwillingness 107:7
unworkable 206:16
update 386:8

updated 260:16
upheld 83:15
uphill 202:9
upstream 317:15
uptick 157:20
urge 29:7 44:1 61:4
 81:7 260:8
usage 153:1
USC 158:9
use 41:18 50:13,17,17
 52:6 62:14,18 64:6
 88:17 89:5,22 93:20
 106:17 108:11,17
 121:14,16,17 123:18
 133:19 165:1 172:7
 173:21 190:14 199:19
 213:17 216:7 237:7
 246:19 251:13 260:17
 280:22 288:17 306:5
 340:17 356:1 364:1
 367:14 373:17 383:19
 389:3 394:3,3 395:5
 395:11 402:13 406:21
 425:17
useful 12:16 14:7 24:22
 27:18 28:6 50:9 53:7
 64:10 76:6 78:21 79:1
 88:20 93:15 123:3
 144:20 146:20 154:7
 162:17 164:19 208:9
 224:3 230:18 235:16
 235:19,22,22 243:7
 250:14 253:2 260:14
 263:13 277:1 329:19
 335:8 337:13 338:5
 338:12,15 340:8
 369:20 371:10,17
 372:15,20 373:7
 374:10 379:10,12
 392:18 393:4,7,9,11
 394:14,15 395:2
 400:2 409:1,10 410:9
 411:2 414:9 415:15
 418:14,20 419:19
 422:20 423:9,20
 424:3,17
user 211:7
users 9:19
uses 123:1 352:16
ushered 18:9
USPTO 1:18,18,19,20
 1:21,22 6:14 7:7,22
 18:5 78:18 90:21 95:2
 96:15 97:16 102:6
 124:3 143:12 144:8
 144:14 145:17,20
 147:2 148:2 149:12
 159:4 214:11 226:17

USPTO's 17:14,17 18:2
usual 38:22
usually 39:18 62:2 63:1
 88:5,6 94:13 103:3
 105:21 227:19 332:6
Utah 355:18
utility 62:8 154:3
 155:20 203:16
utmost 63:16

V

v 13:3 14:6,20 64:20
 67:10,19,19 68:8,10
 68:12,16,18,19 99:8
 101:20,20 104:14
 136:20 148:8 153:16
 158:18 159:19 194:12
 194:12,21 196:6
 221:8 257:5 371:4
 389:6
vacated 325:17
vaccine 212:14
vague 253:6 266:10
 401:18 402:17
valid 65:2,5,9
validity 98:9,20 99:8
 100:10 101:22
Valley 18:2 29:18 42:22
 52:20,22 70:9 71:22
 164:10 335:21 336:1
 345:8
valuable 152:10,17
 154:22 155:17 251:16
 359:5
valuation 297:21 298:2
 300:5
value 48:6 78:16 220:12
 221:9 286:21 302:4
 312:6
values 97:1 167:7
Van 2:4 4:7 57:20,21,22
 64:14 74:19 78:22
variance 173:15 174:4
 175:17 177:13,13
 311:12
variations 356:10
variety 15:10 390:22
various 35:18 158:11
 185:17 205:14 206:6
 206:13 276:1
vast 262:8 300:19
 302:12
vastly 42:17 223:2
 259:18
VC 270:5 300:15 301:8
VC's 304:6
vector 218:17
vehicle 364:2

vending 344:13
venture 56:18 71:14
 270:7 300:2,16
 301:21 302:11 324:8
 324:13 332:21 425:11
venue 280:10
verbally 172:5
verboden 412:5
versa 376:11
versed 50:12
versus 33:18 59:8
 62:10 178:2 180:5
 234:10 303:3 311:12
 330:6,7 331:19 339:8
 339:8 359:17 389:7
vested 104:20
vetting 369:10
viable 243:4 352:9
vice 307:13 376:11
victims 225:18
video 250:4
view 53:1 58:20 72:21
 91:2 93:8 124:8
 130:11 143:11 149:1
 152:14 163:14 185:20
 207:9,19 208:1
 211:10,21 225:1
 236:10,11 250:6,9
 254:11 276:5 285:20
 396:18 422:13,15
 424:8
viewed 117:1 221:22
 249:22
viewing 7:15
viewpoints 12:6 41:17
views 53:2 103:8 113:5
 157:12 159:9 163:22
 198:3 214:15,16
 255:17 256:14 275:18
 275:22 307:17,18,19
 307:20 357:17 409:4
violate 331:9
Virginia 17:4 21:16
 82:16 296:8
virtual 377:21
virtue 92:16
Visa 245:21
visibility 310:14
vision 362:13 399:4
visually 166:3
vital 249:20
vocabulary 156:11,19
 179:20
voice 143:16
void 364:5
volatile 361:19
vs 153:16 396:11
vulnerable 67:10 222:4

259:16 266:12 403:9
 405:21

W

wait 170:9 291:14
waiting 217:11 292:1
 336:19 363:2 364:11
wake 43:18 343:13
Walk 1:11
wallet 245:20
walls 292:22 293:1
wanted 8:13 82:9 88:22
 113:11 149:9 198:9
 198:21 235:17 305:4
 315:5,22 321:22
 322:6 326:15 346:14
 357:19 364:1,6 416:5
 429:5,7
wanting 231:21
wants 156:14 168:6
 274:12 291:18 349:15
war 330:10,10,14 332:2
 332:14
Warmerdam 65:19
warmly 40:21 77:18
warranted 324:3 395:15
washing 222:16,17,17
 305:9
Washington 8:11 150:7
 322:5
wasn't 61:3 384:7 424:5
waste 165:15
wasteful 174:3
watched 151:6
watching 6:8 17:3
 151:3
water 195:17 279:21
 332:19
wave 39:20 40:20
Wayne 3:11,11 5:17
 392:1,3 418:9,13
 424:21
Wayne's 423:10,19
ways 6:13 40:9 46:3
 55:21 64:1 79:2 88:16
 124:11 146:2 154:9
 176:21 179:8,22
 183:17,21,21 228:14
 247:16 252:4 276:17
 309:11 330:7 352:11
 358:2 378:18 405:14
 407:19 412:16 420:12
 420:22
weak 43:11 74:11,20
weakened 193:9
weaknesses 318:2
wealth 70:4
web 6:9 7:2,17 8:1,15

17:4 21:11 78:15
 334:12 340:5
webcast 3:17
website 29:7 181:22
Webster 394:4
weed 48:17
weeks 20:17
weigh 41:10 139:2
 353:9 409:21 410:6
welcome 4:2 6:4 16:20
 44:12 191:1 335:21
 366:20
well-being 170:14
well-deserved 143:22
well-known 12:20 25:6
 147:8 389:4
Wells 389:6
went 30:22 85:11,17
 87:13,13,19,22 127:5
 134:19 194:16 244:17
 307:3 366:18 372:9
 386:13 424:3 429:16
weren't 362:19
Wexler 102:11
whatsoever 295:2
wherever 9:15
wherewithal 247:9
whine 341:3 348:4
whispered 39:9
whistling 38:15
white 292:22 293:1
 329:7
whiz 156:16
whoever's 19:2
wholesale 96:21
wholly 148:20 397:8
wide 380:17 394:15
widely 209:22
wider 390:21
widespread 84:9
win 332:13
wind 36:20 38:15
 420:19
winded 356:12
winds 41:13
wine 269:19 272:14
winner 315:8 402:22
wins 78:6 94:13
wipe 38:9
wire 239:2
wiser 329:11
withdraw 215:21
witness 181:19
Wladawsky-Berger
 405:12
women 195:9 324:11
won 260:1
wonder 171:1

wonderful 70:4 347:9
wondering 124:20
 218:14,22 241:22
 243:3 328:3
Wonderland 365:5
word 128:21 149:7
 199:19 246:17,17
 338:12,18,18 339:3
 344:6 349:14 352:17
word's 340:12
words 33:21 65:3 79:17
 116:13 118:20 153:1
 171:8 174:5 188:7
 190:14 208:7 344:22
 369:16 396:3 416:6
work 8:20 9:18 43:1
 60:12,13 66:19 70:18
 70:20 102:15 130:7
 163:12 191:8 202:18
 203:10 204:8,11
 207:14 223:8 226:11
 229:1,20 232:9,10
 240:1 244:6 245:14
 251:14 252:8 253:17
 256:4 258:5 265:13
 267:19 270:4 271:19
 272:18 278:19 285:10
 285:14 302:10,13
 304:22 306:13,16
 316:12 325:13 328:17
 332:3,15 343:16
 345:8 356:19 374:16
 394:11 400:16 401:20
 403:2 406:18 412:8
 422:5 423:3 429:10
workable 40:12 77:19
 119:17 217:2
workarounds 218:15
 219:1
worked 52:22 66:21
 286:11 294:6 359:2
 384:19 401:1,10
 409:21 412:7
working 9:3 53:4 100:8
 164:2 197:13 219:2
 231:1 240:2 256:1
 263:2 264:4,20
 269:14 271:8 277:2
 286:4 308:8 309:1
 312:9 324:16 334:1
 358:9 360:14 420:4
 423:12
works 134:11 172:22
 192:19 195:12 216:11
 229:19 262:6 271:6,7
 273:22 278:8 304:4,7
 394:12 426:15
world 31:21 42:6 45:13

45:19 51:16,17 52:11
 54:18 69:4,12,19 70:6
 71:9,14 72:3,6 74:15
 150:10 152:12 167:10
 179:13 189:4 192:17
 195:19 196:22 197:10
 207:16 209:13 231:13
 234:22 238:16 257:6
 258:10,12 264:10
 269:6 293:22 334:8
 336:1 343:18 350:4
 351:21 356:17 390:1
 392:20 394:16 396:7
 398:5 404:19
world's 191:10
worlds 330:18
worried 72:15 110:15
 296:13 391:17
worry 34:16 49:4,9
 69:15 74:3
worse 239:10
worst 260:4,4 346:7
worth 58:19 61:5 63:19
 63:21 144:16 220:15
 309:22 310:3 351:16
would-be 97:11
wouldn't 154:21,21,22
 165:15 190:6 285:14
 286:5 302:4 382:5
 410:21 414:22 421:11
wound 138:19
wow 170:1
wrap 19:14
wrapping 19:15
wrestling 30:2
write 19:22 47:8 50:11
 50:16 58:7 188:6
 201:15 235:9 256:2
 256:15 282:13 285:9
 297:1,3,8 345:18
writes 185:20
writing 58:21 60:9
 283:6 285:6
writings 392:16 411:10
written 7:11 11:6 20:18
 20:19 21:1 46:18 49:2
 49:7 52:3 63:9 81:8
 181:1,9,16 198:10,15
 198:19 204:17 249:2
 260:20 270:18,20
 272:6 362:10 364:13
 395:20
wrong 110:20 111:6
 155:1 178:8 180:19
 227:5 238:2 274:14
 281:8 301:6 326:6
 331:10,11,15 384:13
 385:12 410:2

wrongdoing 331:9
wrongs 334:3
wrote 194:22 282:21
 292:18 296:14

X

X 286:14

Y

year 49:11 60:18 70:21
 82:11 98:17 114:17
 127:1,4 233:16
 248:10 264:22 271:10
 277:4 318:8,9,11
 320:2 327:22 337:1
 370:11 378:13 403:19
 404:18 409:14 412:12
year's 301:12
years 11:2,11 12:4,8
 15:8 25:11,11 27:5
 29:16 32:12 42:17,17
 42:18 45:7 47:8 65:15
 70:5 114:18 129:18
 129:19,20 138:1
 143:6 151:9,14
 158:13 159:6 161:6
 165:5 180:20 181:19
 186:11 216:5 233:18
 233:20 239:3 242:5,6
 245:10 252:10 267:5
 280:1 291:14 292:1
 295:14 322:12 331:12
 340:4 345:10 346:3
 347:6 348:13 360:12
 362:4,11 364:5 369:7
 373:9 392:4 394:21
 401:2,10 405:1
 406:15 412:4,6
 428:13

years' 219:12 301:11

yellow 19:11,12,15
 152:2 385:2

yellowness 152:3

yesterday 370:13

yew 132:9,14

yield 63:2 407:6

yoga 292:19 293:2,9

York 90:15

young 315:20

Z

Zealand 295:11,14

zoning 412:14

0

0.3 324:12

1

1(a) 383:7
1,400 107:18
1:55 244:18
10 19:20 233:18 351:8
10,000 365:11 366:8

10:38 134:19

10:52 134:20

100 49:21 127:10

129:19 258:13

100(b) 93:19

101(a) 203:11

101(b) 203:15

101(c) 203:20

102 4:11 54:22 55:1

91:10 95:15 145:4

150:22 160:7 310:8

310:21 326:2 342:16

363:6 365:15 366:6

397:8,17,22 399:16

401:21

103 25:6 27:15 28:7,14

55:1,3 74:21,21 91:9

91:10 95:16 125:11

125:17 149:3 150:22

160:7 171:16 176:12

176:12 177:16 183:6

183:8 184:15 185:2

185:11 286:18 310:8

310:21 326:2 342:16

363:6 365:15 397:8

397:17,22 399:9,16

401:22

10th 370:10

11 322:12 345:10 346:3

378:12

112 4:12 47:17 91:10

95:16 125:11 151:1

156:12 160:7 180:21

189:20 190:1 222:4

286:18 341:16 342:22

345:22 365:15 395:19

398:1 399:17 401:22

112(f) 52:5,7 189:21

190:3,6

11th 370:10

12 242:6 259:17 321:15

12(b)(6) 260:1 268:10

12,000 406:16

12:51 244:17

120 4:13 324:17

13 198:14

135 4:14

143 4:15

149 4:15

15 19:20 181:19 233:18

344:7

150 151:9,14

157 4:16

16 245:20,22 246:3

164 4:16

17 143:6

170 4:17

1700s 418:15

177 4:18

1780 393:10

1790 393:2

1793 386:8

18 319:10

1833 394:4

1836 386:3

1897 10:16

18th 20:20 81:9 398:13

191 4:19

1952 10:19 337:19

396:22 397:13,19

399:8

197 4:20

1980 396:13

1981 107:19 136:19

181:21 396:11

1990s 46:18 426:4

1995 324:19

1998 136:22

1L 389:10

2

2 1:5 2:5 175:21 177:5

204:5 309:7

2.5 404:3

2:51 307:3

20 32:12 58:8 65:15

98:17 412:4,6

20-plus 99:21

20-year 41:21 43:22

20/20 362:13

200 300:15 394:21

2000 56:14 427:10

2000s 46:18

2001 162:19 166:20

2003 166:20

2004 166:21

2005 166:21

2006 373:18 403:19

2010 12:13 107:20

2011 318:7 320:19

321:7 338:2 358:10

2012 135:21 136:5

264:14 265:2 314:2

318:9 319:21 403:17

403:20

2013 43:7 158:4

2014 100:1 135:21

136:8 163:7 312:2

319:9,9 320:6,12

404:4

2015 313:14

2016 1:8 100:18 404:20
205 4:20
21 4:5
210 4:21
2106 260:17
218 4:22
21st 198:11 204:16
 219:8
245 5:1
247 5:2
25 57:8
255 5:2
261 5:3
27 162:10 182:16,18
 255:21
272 5:4
282 98:8,20 99:2,12,13
 100:9,21
29 4:5 358:12

3

3 2:9 4:14 177:6 199:1
 204:6
3:00 306:22
3:01 307:4
30 19:6 29:16 49:21
 161:6
30-some 392:4
307 5:6
30s 418:18
312 5:6
321 5:7
326 5:7
33(a) 240:15
335 5:8
343 5:10
35 137:22 158:9 238:10
 239:22
36 25:13 386:9
3600 25:13 27:6 80:17
 80:21
3659 175:19
367 5:14
3689 175:21
37 4:6
375 5:15
38 193:1
380 5:16
392 5:17

4

4 2:13 4:19 177:8
 204:13
4,500 348:15
40 19:4 49:21 340:4
400 5:18
408 5:20
429 5:22

44 4:6
45 193:2
451 2:20

5

5 1:8 2:16 5:1 177:12
 204:13 242:5 396:1
5/4 67:20
5:01 429:16
50 49:21 129:18,20
 248:14 324:16 351:7
 403:17,20 428:12
500 258:13
52 4:7
555 1:11
57 403:17
58 4:7

6

6 2:19 4:2 5:5 177:15
 193:2 199:1
60 70:20 428:12
64 4:8
65 324:18

7

7 3:7 4:3 5:12 177:16
 198:14
7.5 404:5
705 25:13 26:3 80:21
70s 78:3 396:10
75 107:20 129:18
787 338:21
79 397:11

8

8 337:11,12 392:12
 395:5
8:30 1:11
8:33 6:2
80 99:10 107:21 245:14
 376:19
81 4:10 193:3
82 266:4
89 175:19
892,000 328:9

9

90 4:10 25:19 42:2
95 4:11
9th 370:10

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