

## ALICE - ONE YEAR LATER

LES - Silicon Valley Chapter  
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398 DSAWD

# Introduction

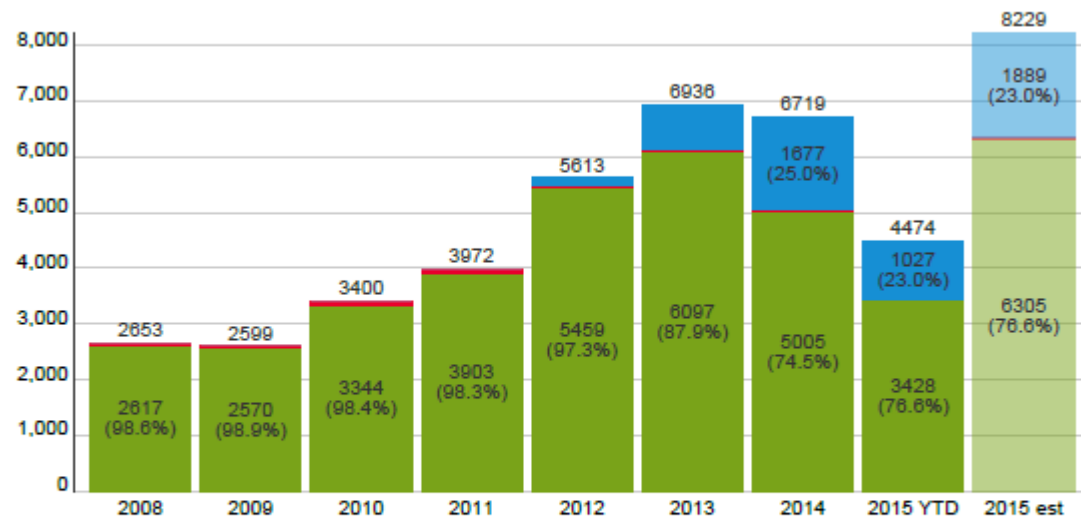
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- *CLS Bank v. Alice* (U.S. Supreme Court 2014)
  - Two Step Test:
    - 1) is the claim “directed to” a patent-ineligible abstract idea
    - 2) do the elements of the claim—considered both individually and as an ordered combination—transform the nature of the claim into a patent-eligible application of the abstract idea
  - “inventive concept”— must be something sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself

# Case Filing Statistics: All District Courts

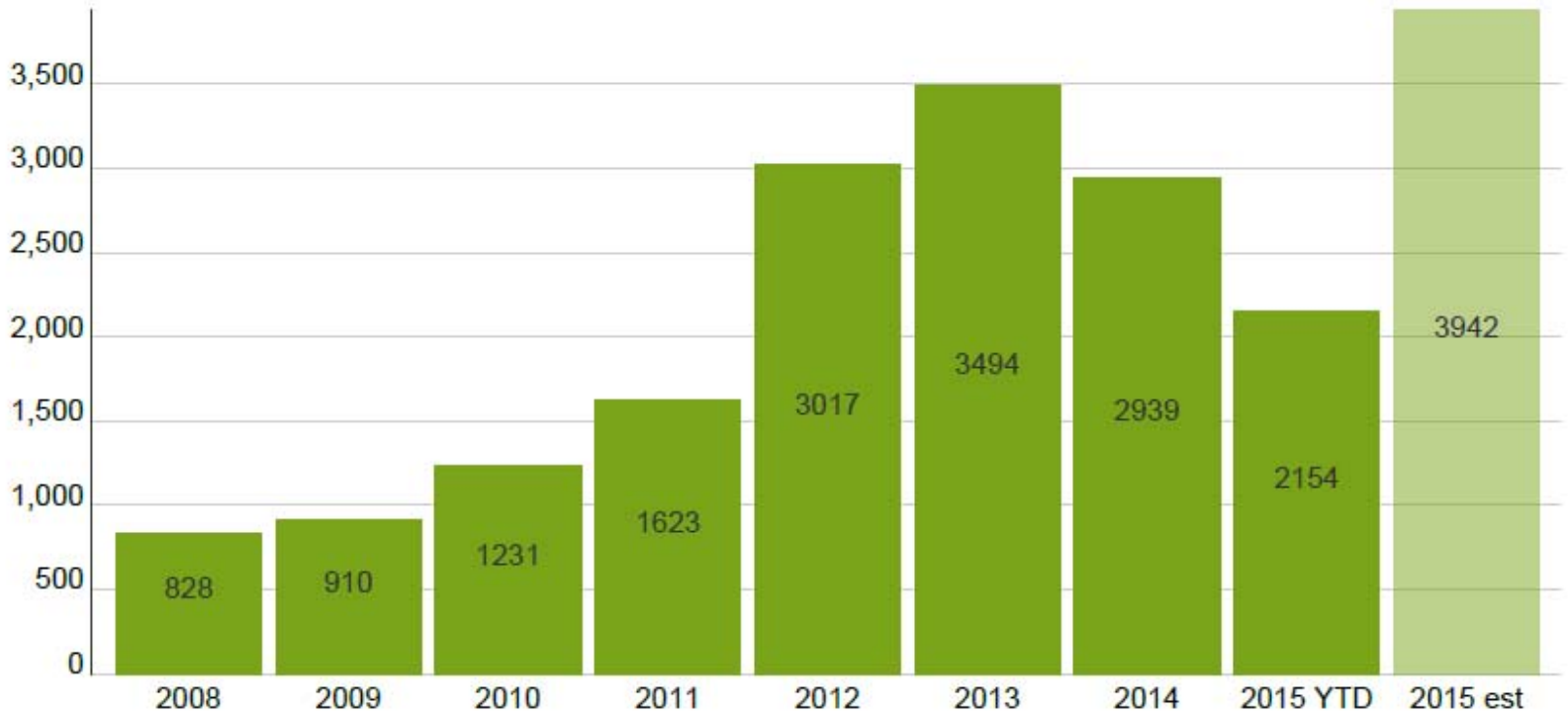
## New Patent Cases

 DocketNavigator analytics



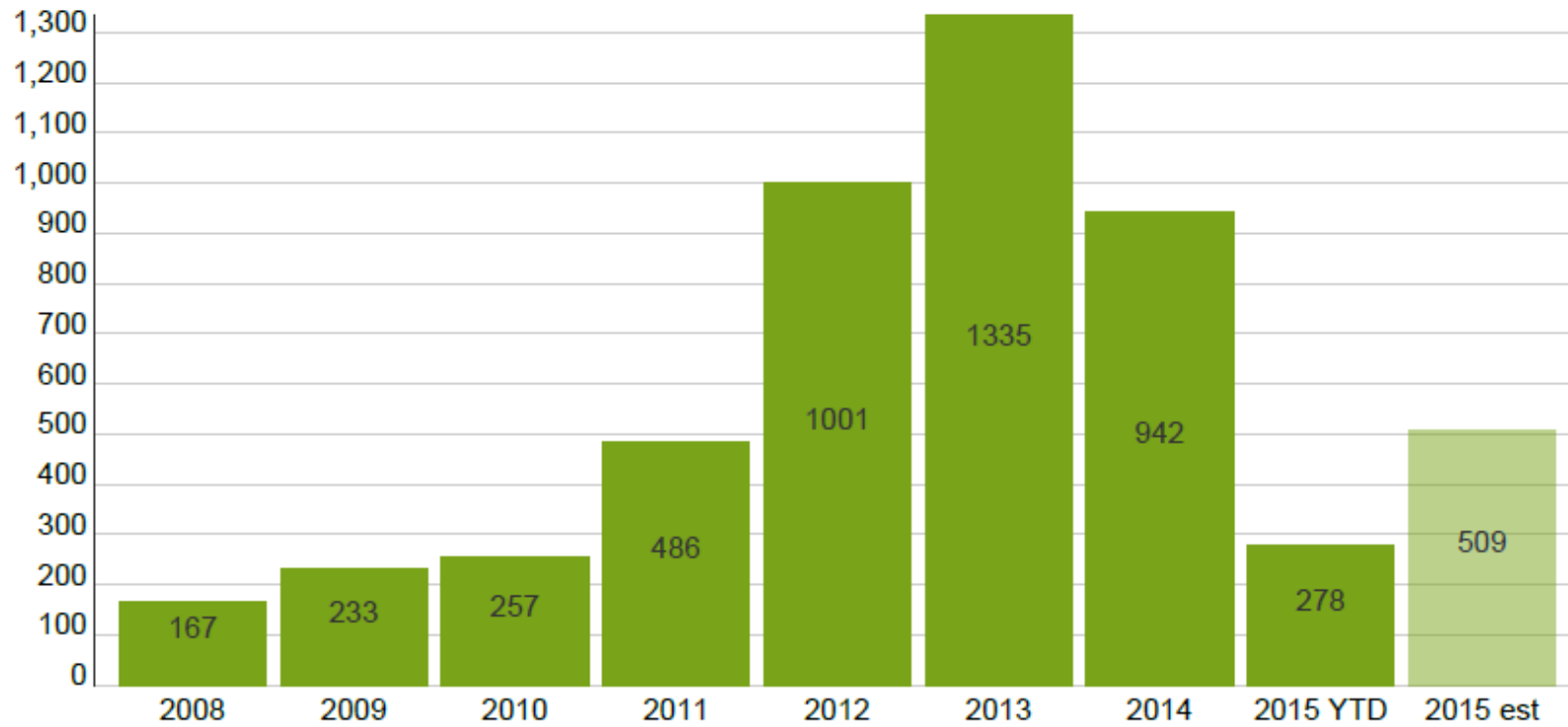
Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	2817	2570	3344	3903	5459	6097	5005	3428	6305
International Trade Commission	36	29	56	69	43	47	37	19	35
Patent Trial and Appeal Board					111	792	1677	1027	1889
<b>Total</b>	<b>2853</b>	<b>2599</b>	<b>3400</b>	<b>3972</b>	<b>5813</b>	<b>6938</b>	<b>6719</b>	<b>4474</b>	<b>8229</b>

# Case Filing Statistics: D. Del, N.D. Cal, C.D. Cal & E.D. Tex



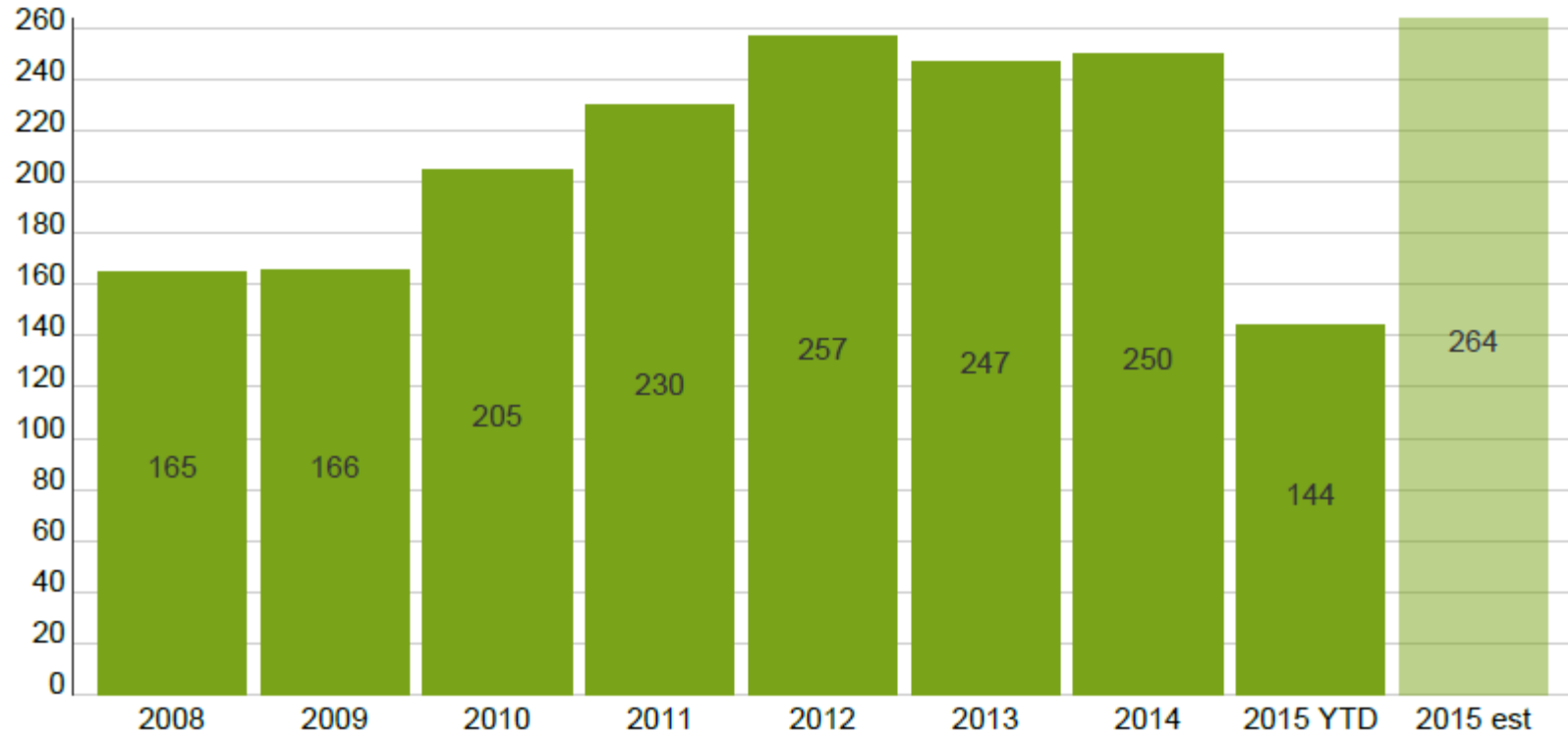
Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	828	910	1231	1623	3017	3494	2939	2154	3942

# Case Filing Statistics: D. Del



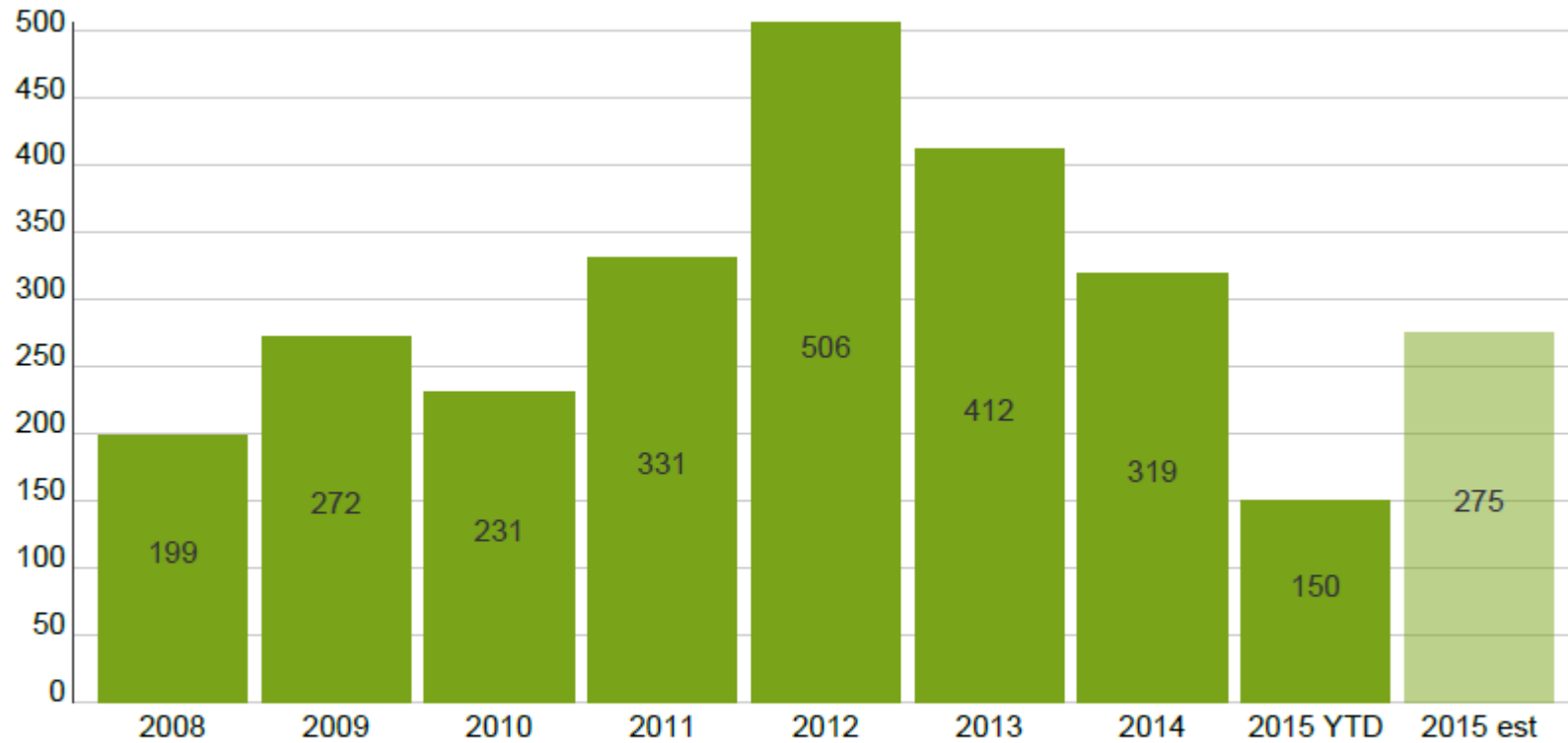
Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	167	233	257	486	1001	1335	942	278	509

# Case Filing Statistics: N.D. Cal



Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	165	166	205	230	257	247	250	144	264

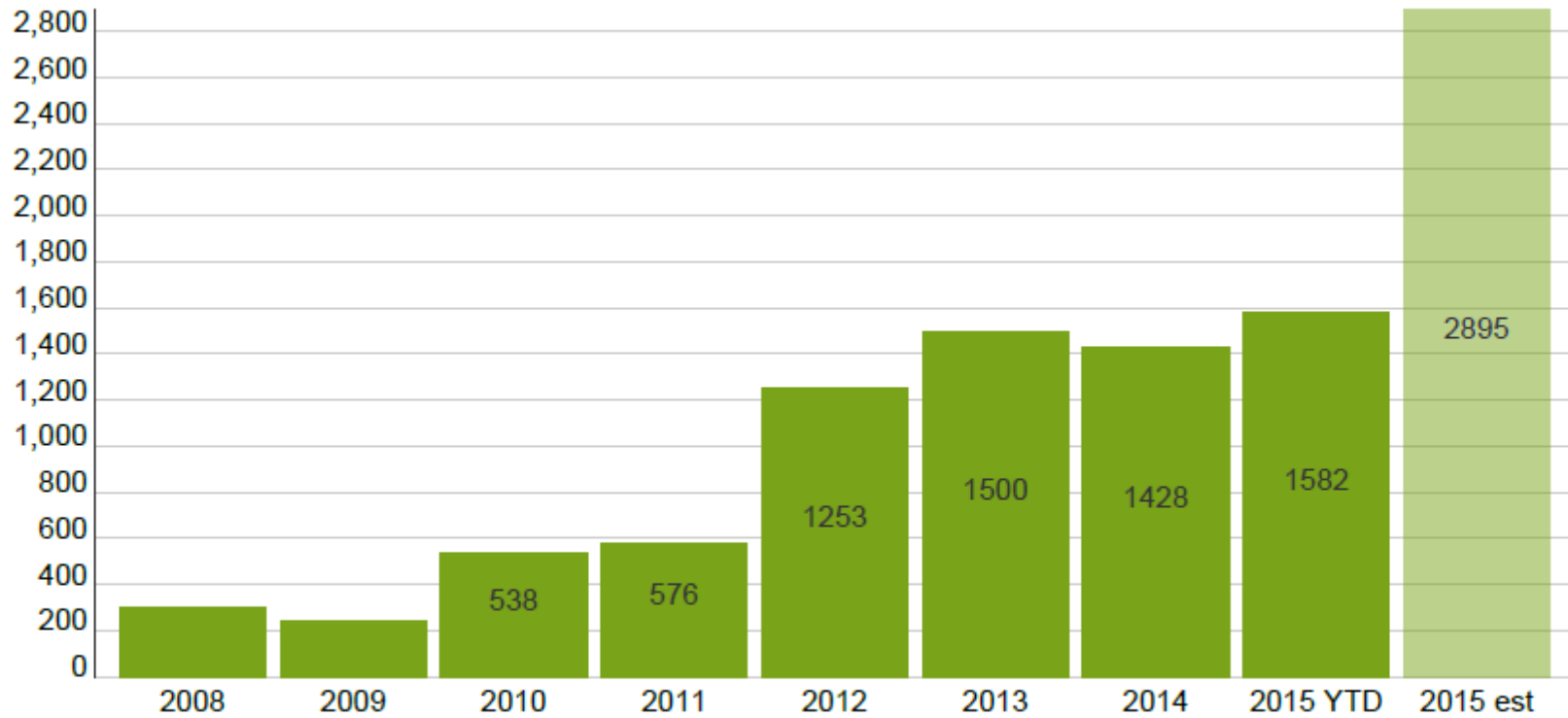
# Case Filing Statistics: C.D. Cal



Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	199	272	231	331	506	412	319	150	275



# Case Filing Statistics: E.D. Tex



Count	2008	2009	2010	2011	2012	2013	2014	2015 YTD	2015 est
U.S. District Courts	297	239	538	576	1253	1500	1428	1582	2895

# Chronological Overview of post-Alice Federal Circuit Decisions

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- Digitech Image Technologies LLC v. Electronics for Imaging Inc., 758 F.3d 1344 (Fed. Cir. 2014) (**Invalid**)
- Planet Bingo, LLC v. VKGS LLC, 576 Fed.Appx. 1005 (Fed. Cir. 2014) (**Invalid**)
- BuySAFE Inc. v. Google Inc., 765 F.3d 1350 (Fed. Cir. 2014) (**Invalid**)
- Ultramercial LLC v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. 2014) (**Invalid**)
- DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014) (**Valid**)
- Content Extraction and Transmission LLC v. Wells Fargo Bank NA, 776 F.3d 1343 (Fed. Cir. 2014) (**Invalid**)
- OIP Technologies, Inc. v. Amazon.com, Inc., No. 2012-1696, 2015 WL 3622181 (Fed. Cir. June 11, 2015) (**Invalid**)
- Internet Patents Corp. v. Active Network, Inc., No. 2014-1048, 2015 WL 3852975 (Fed. Cir. June 23, 2015) (**Invalid**)

# Federal Circuit's DDR Decision

[DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 \(Fed. Cir. 2014\)](#)

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- Patent found eligible under Section 101
- Claim language:
  - “using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page.”

# Federal Circuit's *DDR* Decision

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- Did not decide Step 1 of Alice analysis:
  - Noted that the claims did not recite a mathematical formula, or a long-standing commercial practice.
  - But did not rule whether the patent claimed an “abstract idea”

# Federal Circuit's *DDR* Decision

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- Held that Step 2 was satisfied
- “The claimed solution is necessarily **rooted in computer technology** in order **to overcome a problem specifically arising in the realm of computer networks**”.
- In particular, the '399 patent's claims address the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after “clicking” on an advertisement and activating a hyperlink.
- Further, unlike in *Ulramercial*, **the patent does not broadly claim use of the internet to perform abstract business practices**.
- The claims specify how the interactions with the internet are manipulated to yield a desired result – a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.

# Abstract Ideas across the Atlantic

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## US

### 1) Subject-Matter Eligibility

Statutory categories of invention from 35 U.S.C. § 101 (process, machine, manufacture, or composition of matter).

### 2) Judicial Exceptions

A) Laws of nature, natural phenomena, and abstract ideas.

B) Amount to significantly more than the judicial exception?

## Europe

### 1) Technical Character

The term “invention” in Art. 52(1) EPC interpreted as implying a requirement of technical character. “Technical solution to a technical problem”.

### 2) Excluded Subject Matters

Art. 52(2) EPC: discoveries, scientific theories [...] presentations of information.

Art. 52(3) EPC: only excluded “as such”

# Case Law Trends

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- The “rooted in computer technology” rationale of DDR requires:
  - Innovative and new use of internet or computer networks, etc. to solve a problem unique to that context
  - This innovative aspect must be specifically defined in the claims, not just claiming use of the internet or computer or computer network in a generic way
  - The claims must be directed towards some improvement in the functioning of the computer or some technological area, or must override the routine, conventional sequence of events associated with the computer or network’s operations.

# Case Law Trends

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- An overwhelming majority of invalidations appear to involve abstract ideas being implemented on a generic computer.
- This rationale accounts for more invalidations than all others combined.



# Case Law Trends

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- Specificity in claims is important.
- Courts have uniformly stated that functional language is insufficient, because it usually means that there is nothing inventive about the claims.
  - E.g., Loyalty Conversion Sys. Co. v. American Airlines Inc., No. 2:13–CV–655, 2014 WL 4364848 (E.D. Tex. Sept. 3, 2014)
- Claiming the end result, as opposed to the steps to get there (which is where any inventive concepts will be found in the abstract idea context) will almost always result in invalidation.
- Even if the spec provides support, limitations are not read into the claims.
- Also, patentees and litigants should beware of language consisting of generic hardware as these often times may only serve to underscore the generic nature of the hardware and the function it performs.

# Trends – Step One Analysis

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- The first step of the Alice test is determined by looking at the purpose of the claims.
  - Generally a broader, “quick look” type of inquiry.
- Courts will often determine if claims are directed to abstract ideas merely by comparing them to the claims at issue in *Alice* and *Bilski*.
- The court does not filter out claim elements found in prior art and evaluate the remaining elements for abstractness.
  - Exception: McRo case in CD Calif (heavily criticized)

# Trends – Step Two Analysis

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- Most courts do not rely heavily on the machine or transformation test
  - Exception: Delaware.
    - E.g., TriPlay, Inc. v. WhatsApp Inc., No. CV 13-1703-LPS, 2015 WL 1927696 (D. Del. Apr. 28, 2015)
- Most courts do not try to determine the extent to which an invention may “preempt” the field of the abstract idea, since such an inquiry is inherent in the second step of the Alice test
  - Exception: CD Calif.
    - Cal. Tech., 59 F. Supp. 3d 974 (C.D. Cal. 2014)

# Trends – Step Two Analysis

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- Courts in most districts have started looking to the “rooted in computer technology” rationale of DDR
  - Do the claims:
    - “purport to improve the functioning of the computer itself or effect an improvement in any other technology or technical field” or
    - “override the routine and conventional sequence of events in order to cause some deviation from a computer or network operating in its normal, expected manner.”

# Analysis of Specific Claims Held Patentable

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- California Inst. of Tech., 59 F. Supp. 3d 974 (C.D. Cal. 2014)
  - Patent claimed a method for encoding and decoding data in accordance with IRA codes as patent eligible subject matter.
  - Step 1 of Alice analysis:
    - Abstract: “Encoding and decoding data are long standing steps in the process of error correction”.
    - Although the claims were directed to one specific method of error correction, step one looks only to the general purpose of the claims.

# Analysis of Specific Claims Held Patentable

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- In step two, inventive concepts made claims patentable.

## Claim

A method comprising:

receiving a collection of message bits having a first sequence in a source data stream;

generating a sequence of parity bits, wherein each parity bit “ $x_j$ ” in the sequence is in accordance with the formula

$$x_j = x_{j-1} + \sum_{i=1}^{\lambda} v_{(j-1)\lambda+i},$$

where

“ $x_{j-1}$ ” is the value of a parity bit “ $j-1$ ,” and

$$\sum_{i=1}^{\lambda} v_{(j-1)\lambda+i}$$

is the value of a sum of “ $a$ ” randomly chosen irregular repeats of the message bits; and

making the sequence of parity bits available for transmission in a transmission data stream.

## Court’s Analysis

The claims recited the formula of generating a parity bit by accumulating two values: the value of the previous parity bit and the sum of a number of randomly chosen irregular repeats of message bits. (Pg. 994)

This formula was the determinative feature, as the other limitations in the claim were considered generic.

The court held that the formula constituted an inventive concept that sufficiently limited the claim’s preemptive effect. The irregular repetition of message bits and the use of a prior parity bit for calculating a subsequent parity bit were inventive concepts that yielded significant benefits, namely, balancing the goals of efficiency and accuracy in error correction. (Pg. 996)

Although the determinative limitations were mathematical, they were narrowly defined and tied to a specific error correction process. The limitations were also not necessary or obvious tools for achieving error correction, and greatly limited the scope of the claims, leaving untouched many other types of error correction. (Pg. 996)

# Analysis of Specific Claims Held Patentable

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- Ameranth, Inc., No. SACV 11-00189 AG, 2014 WL 7012391 (C.D. Cal. Nov. 12, 2014)
  - claims directed towards monitoring a physical casino poker game.

# Analysis of Specific Claims Held Patentable

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- Step 1: **Not** Abstract:
  - Although claim 1 contained the limitations of “transmitting the total elapsed time to a compensation system” and “calculating an amount of compensation for the particular player based on the total elapsed time and storing the calculated compensation in at least one of a system database or the player database” it is hard to say that claim 1 is directed to “the abstract concept of a customer loyalty program, and more specifically to computer automation of a player rewards system within a poker room” when it includes key steps that are not related to the compensation system recited in the claim



# Analysis of Specific Claims Held Patentable

## Claim

1. A computerized method for monitoring a physical casino poker game comprising:
  - a. receiving a poker player check-in input containing player identification information and player poker game type preference;
  - b. identifying a particular player in a player database from the player check-in input;
  - c. determining the seating availability for said particular player's poker game type preference from a table availability database including game types in real time;
  - d. adding said particular player to a waitlist for said poker game type preference if no matching table for said game type is currently available;
  - e. displaying indicia identifying said particular player on a public waitlist display, said public display including the display of information comprising at least two different poker game types and waiting players for each game type and wherein said public display is suitable for viewing by a multiplicity of players or prospective players throughout the poker room;
  - f. selecting a table for said particular waiting player matching said waiting player's selected game type when it is available and then assigning said player to that available table;
  - g. receiving check-out input regarding said particular player containing player identification information;
  - h. identifying the particular player from the player check-out input information;
  - i. removing the player from the game and from the table;
  - j. updating the table availability to reflect that a seat for the particular poker game type at said table is currently available;
  - k. ascertaining the total elapsed time between receiving the check-in input and the check-out input of the player;
  - l. transmitting the total elapsed time to a compensation system; and
  - m. calculating an amount of compensation for the particular player based on the total elapsed time and storing the calculated compensation in at least one of a system database or the player database.

## Court's Analysis

Defendants assert that the steps that could be omitted while leaving intact a player reward system include at least steps c, d, e, and f, which cover determining seating availability, adding players to waitlists, putting player identifying information on a public waitlist display, and assigning a player to a table. (Pg. 6)

And even assuming that those elements should be ignored in the first step, as to the second Alice/Mayo step, asking whether there is "significantly more" in the claims, Defendants have not shown why these other elements are insufficient. Put differently, one could implement many different player reward systems that do not infringe the claims. (Pg. 6)

The question in the abstract idea context is whether there are other ways to use the abstract idea in the same field," which can show that the preemption concern is not implicated. Thus, Defendants have not shown how these claims implicate "the basic underlying concern that these patents tie up too much future use" of the abstract idea of a player reward system. (Pg. 6)

Defendants argue that certain prior art shows that the abstract concept of "a customer loyalty program directed to poker players ... was practiced prior to the date of the invention...." Defendants rely on multiple combinations of references to make that argument, and as couched by Defendants, those combinations seem more like an obviousness argument under 35 U.S.C. § 103 than a patent eligibility analysis under 35 U.S.C. § 101

# Analysis of Specific Claims Held Patentable

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- Smartflash LLC v. Apple Inc., No. 6:13 cv 447-JRG-KNM, 2015 WL 661174 (E.D. Tex. Feb. 13, 2015)
  - Patent claimed data storage and access systems for paying for and downloading digital content.
- Step 1: Held Abstract
  - The general purpose of the claimed invention was conditioning and controlling access to data based on payment, which is a fundamental building block of the economy, especially in the digital age.

# Analysis of Specific Claims Held Patentable

- Step 2 of Alice analysis

## Claim

A method of controlling access to content data on a data carrier, the data carrier comprising non-volatile data memory storing content memory and non-volatile parameter memory storing use status data and use rules, the method comprising:

receiving a data access request from a user for at least one content item of the content data stored in the non-volatile data memory;

reading the use status data and use rules from the parameter memory that pertain to use of the at least one requested content item;

evaluating the use status data using the use rules to determine whether access to the at least one requested content item stored in the content memory is permitted; and

displaying to the user whether access is permitted for each of the at least one requested content item stored in the non-volatile data memory.

## Court's Analysis

In *Ultramercial II*, the court characterized the limitations as merely distributing media over the Internet with the condition of viewing an advertisement and recording events in an activity log. In *Content Extraction*, the claims simply recited the long-practiced abstract idea of collecting data, recognizing certain data, and storing that data with already well-known methods.

The asserted claims here recite specific ways of using distinct memories, data types, and use rules that amount to significantly more than the underlying abstract idea. Although in some claims the language is functional and somewhat generic, the claims contain significant limitations on the scope of the inventions. (Pg. 8)

As in *DDR Holdings*, the patents here do not simply apply a known business practice from the pre-Internet world to computers or the Internet. “The claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” (Pg. 8)

Digital Rights Management is a technology that was developed after widespread use of the Internet. Digital content became easy to reproduce for anyone with access to a computer. Piracy of digital content became widespread through means unknown to the pre-Internet world. The patents claim methods and systems designed to prevent such easy and unauthorized reproduction and access while allowing the access to be nearly instantaneous and the storage to be permanent. (Pg. 9)

The patents also address the unique problem of controlling a user's access to data that the user already possesses by tracking use data and restricting access according to use rules. This sort of access control was also unknown in the pre-Internet era, even though Defendants' expert opined that the patents can be likened to ordering a DVD over the telephone. (Pg. 9)

Further, the claims do not risk preempting all future inventions related to exchanging access to data for payment on the Internet. Instead, when taken as ordered combinations, the claims recite specific ways of combining system components and method steps beyond the routine use of the Internet. (Pg. 9)

# Analysis of Specific Claims Held Patentable

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- Messaging Gateway Solutions, LLC v. Amdocs, Inc., No. CV 14-732-RGA, 2015 WL 1744343 (D. Del. Apr. 15, 2015)
  - Patent directed to enabling communication between a wireless device and an internet server.
- Step 1: Held – Abstract:
  - Patent claims a method that enables a device that ordinarily cannot send a message to a different device to do so.
  - Similar to a translator assisting two people who speak different languages to communicate with each other.

# Analysis of Specific Claims Held Patentable

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- Step 2 of Alice analysis:

## Claims

A method of using a computer system to facilitate two-way communication between a mobile device and an Internet server, comprising:

the computer system receiving a text message via a first communication path;

the computer system inserting at least a message body of the text message into an Internet Protocol (IP) message; and

the computer system transmitting the IP message to the Internet server, via a second communication path,

wherein the text message originates from the mobile device as a short message service (SMS) text message, and wherein the SMS text message contains a multidigit address that is fewer than seven digits and that is associated with a URL of the internet server.

## Court's Analysis

The Court finds that Claim 20 contains an inventive concept sufficient to render it patent eligible. Like the claims in DDR Holdings, Claim 20 “is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”

Claim 20 is directed to a problem unique to text-message telecommunication between a mobile device and a computer. The solution it provides is tethered to the technology that created the problem. (Pg. 5)

While it is true that not all claims directed at addressing Internet issues are patent eligible, this claim is analogous to those in DDR Holdings. It specifies how an interaction between a mobile phone and a computer is manipulated in order to achieve a desired result which overrides conventional practice. Conventionally, phones could not send SMS text messages to computers. The claimed method manipulates that interaction by translating the message in a way that allows the computer to receive and understand the message. (Pg. 5)

Unlike the claims identified by Defendants, Claim 20 contains a sufficient inventive concept to render it patent-eligible. It is firmly rooted in technology and is addressed to a specific problem arising in the realm of mobile device-to-Internet communication. Furthermore, it contains sufficient limitations to prevent it from preempting an abstract idea. (Pg. 5)

# Analysis of Specific Claims Held Unpatentable

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- TriPlay, Inc. v. WhatsApp Inc., No. CV 13-1703-LPS, 2015 WL 1927696 (D. Del. Apr. 28, 2015) (Patent invalidated)
  - Patent directed to converting messages, based on certain criteria relating to communication or display capabilities of the originating or destination devices or on the relevant communication media.

# Analysis of Specific Claims Held Unpatentable

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- Step 1 of Alice analysis:
- The abstract idea can be, but need not amount to a preexisting, fundamental truth about the natural world that has always existed”, or a “method of organizing human activity (such as a longstanding commercial practice”).
  - Here, the claims only cover the abstract idea of converting and forwarding messages.
  - Claim 12 does reference certain seemingly concrete elements, such as the originating and destination communication devices, and the “messaging system” that acts as an intermediary and converts the messages.
  - Claim 1 includes an “access block” and a “media block” which could be argued to possess a particularized form, depending on their construction.
- But the mere presence of some concrete claim elements—even elements associated with computer- or Internet-based technology—is insufficient to indicate that the claims as a whole are not directed to an abstract idea, if those elements are well overtaken in the claim by the articulation of the abstract idea itself.

# Analysis of Specific Claims Held Unpatentable

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- Step 2 of Alice analysis

## Claims

A method of message communication via a messaging system between one or more originating communication devices assigned to a sender and one or more destination communication devices assigned to a receiver, the method comprising:

a) before delivery to the receiver, obtaining by a messaging system a message having initial characteristics comprising, at least, a message format and an initial message layout;

b) selecting a message layout and **converting** at least said initial message layout to said selected message layout to form an adapted message layout in accordance with at least one criterion selected from a group comprising:

i) criterion related to message communication capabilities of the destination communication device with regard to message communication capabilities of the originating communication device;

ii) criterion related to message displaying capabilities of the destination communication device with regard to message communication capabilities of the originating communication device; and

iii) criterion related to communication media between originating and destination device; and

c) facilitating delivery of the adapted message to the receiver.

## Court's Analysis

The plaintiff argues that the 'messages' must be electronic messages that are sent and received by electronic communication devices' which prevents the claims from preempting all forms of converting and forwarding messages that humans have done on paper for centuries. The prohibition against patenting abstract ideas cannot be circumvented by "attempting to limit the use of the idea to a particular technological environment." (Pg. 13)

Second, Plaintiffs assert that the message conversion at issue is accomplished by an "intermediary" computer (the "messaging system" referenced in the claim). Yet this intermediary computer can simply be a generic computer, which is not sufficient to render the claim patent eligible. The mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." (Pg. 15)

In DDR Holdings, for example, the claims were held to be patent eligible under the second step of the Alice test because they involved a "solution" to a problem, and which described "how interactions with the Internet are manipulated to yield a desired result" and avoided pre-emption by claiming only a "specific way" of performing the task, such that "the claims at issue did not attempt to preempt every application of the idea." (Pg. 15)

Plaintiffs do not identify any such "specific" functionality here, and an examination of claim 12 reveals none. Claim 12 does not purport to limit itself to a specific way of converting a message from one layout to another—it simply covers the act of "converting" messages, based on certain criteria relating to communication or display capabilities of the originating or destination devices or on the relevant communication media. (Pg. 15)