Attacking Claims Under *Alice* and Drafting Claims to Avoid It

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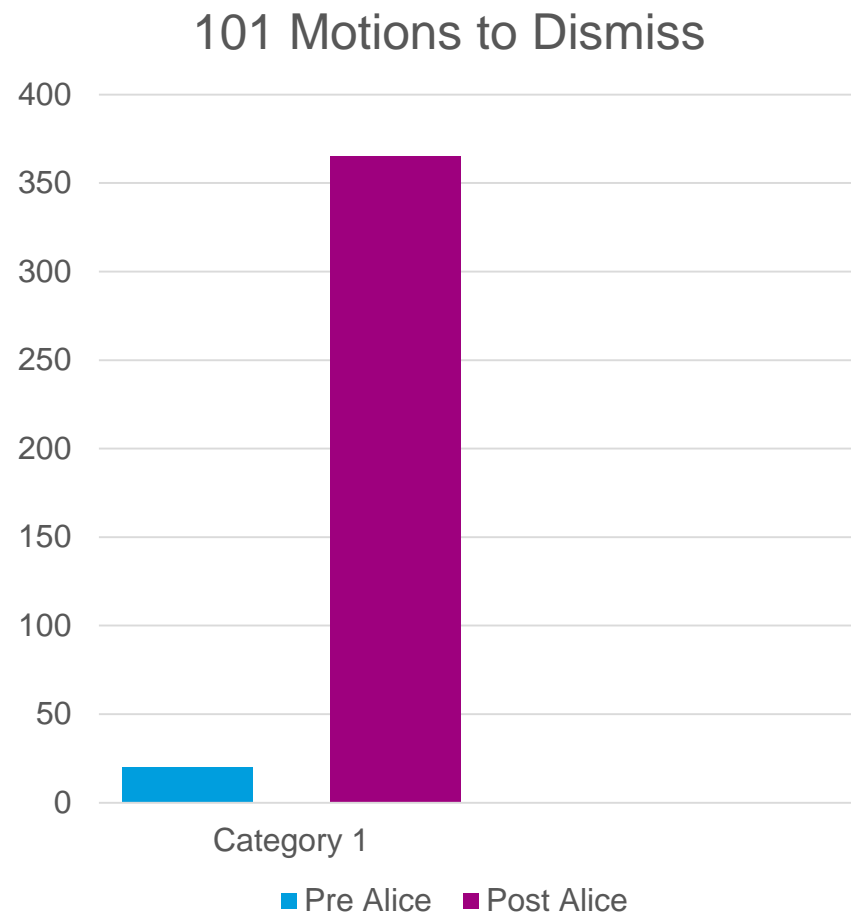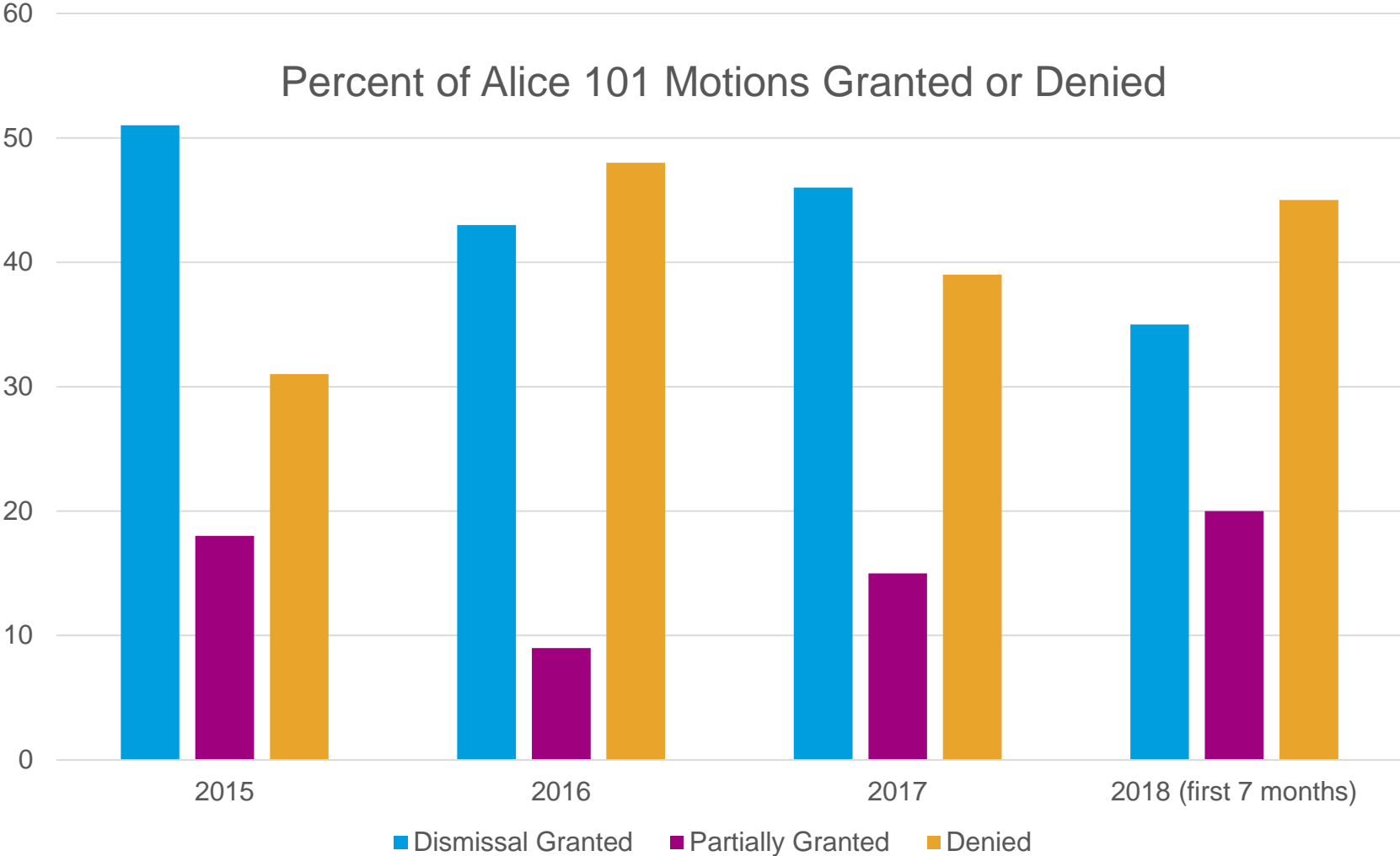1 213-615-1848
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Alice Statistics

- "In the 30 months prior to *Alice*, only a total of 20 decisions were issued by district courts involving motions to dismiss based on patent subject matter eligibility under 35 U.S.C. § 101. However, since the Supreme Court's *Alice* decision on June 19, 2014, through July 31, 2018, district courts have issued a total of 365 decisions on these types of motions. This is a 1,725 percent increase in the total number of motions-to-dismiss filed since *Alice*."

- https://www.irmi.com/articles/expert-commentary/update-on-alice-and-motions-to-dismiss

101 Motions to Dismiss

Alice Statistics – Success Rate?

Percent of Alice 101 Motions Granted or Denied

Legend: Dismissal Granted · Partially Granted · Denied

https://www.irmi.com/articles/expert-commentary/update-on-alice-and-motions-to-dismiss

Alice Statistics

- **Judges are becoming overwhelmed with *Alice* related 101 motions**

- **Some are attempting creative solutions**

"Eastern District of Texas District Judge Rodney Gilstrap, who has the busiest patent docket in the United States, recently announced a new model procedure for handling the onslaught of so-called "101" or "*Alice*" motions … The new procedure, contained in a sample docket order posted to the Eastern District of Texas website, requires leave from the court, upon a showing of good cause, if a party wishes to bring an early *Alice* motion."

https://www.technologylawdispatch.com/2015/06/intellectual-property/judge-gilstrap-announces-new-procedure-for-alice-motions-in-patent-cases/

Section 101 Day "The judge was about to conduct an experiment.

In the courtroom that early February day were more than two dozen lawyers, representing companies in several different patent infringement cases. Some lawsuits were related; others were not. What each had in common was a question about whether an invention was directed to an abstract idea that is not eligible for patent protection under Section 101 of the Patent Act … decisions on patent eligibility would swiftly follow. "

https://www.law360.com/articles/1133434/-section-101-day-yields-quick-ruling-on-patent-eligibility

The Patent Office has Taken Notice as Well

- **Revised Patent Subject Matter Eligibility Guidance on January 7, 2019**

- Is the claim abstract? (i.e. judicial exception to paten eligibility)

  - Mathematical concept

  - organizing human activity

  - economic practices

- If so, is it "integrated into a "practical application"? If so, valid

- Practical Application:

  - improve the functioning of a computer (we will discuss this example in greater detail)

  - treat a disease or medical condition

  - is implemented into a machine that is integral to the claim

  - transforms an item into a different thing

  - or otherwise links the exception to some particular technology in a meaningful way

See, https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility; *see also*, https://www.law360.com/articles/1115368/uspto-patent-eligibility-revamp-expected-to-cut-rejections

The Patent Office Guidance - Examples

Claim 2:

A method of rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining the amount of use of each icon using a processor that tracks how much memory has been allocated to each application associated with each icon over a predetermined period of time; and

automatically moving the most used icons to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Patent Eligible

Claim is not Abstract: "Determining step" requires action by a processor, e.g., that cannot be practically applied in the mind … it requires a processor accessing computer memory indicative of application usage

Claim 3:

A method of ranking icons of a computer system, the method comprising:

determining, by a processor, the amount of use of each icon over a predetermined period of time; and

ranking the icons, by the processor, based on the determined amount of use.

Not Patent Eligible

Claim is Abstract: determining usage of an icon broadly covers mental activity

Not integrated into a "practical application" or inventive concept: simply recites generic computer component, e.g., determination by a processor

See, https://www.uspto.gov/sites/default/files/documents/101_examples_37to42_20190107.pdf

Rise of 101 Motions – Many Still Surviving

Indeed, 101 Motions are Plentiful but perhaps overused

- "Sitting behind the bench at the Wilmington, Delaware, federal courthouse, Chief Judge Leonard Stark explained that his docket had become flooded with legal briefs arguing that a patent covers ineligible material."

- "It absolutely does not follow that you should expect that I am going to invalidate every ... patent I see on a 101 motion," the judge said, adding that he will "look at each case on its own, applying the law to the facts and circumstances, considering, of course, all the arguments made."

- *Law360*: 'Section 101 Day' Yields Quick Ruling On Patent Eligibility

https://www.law360.com/articles/1133434/-section-101-day-yields-quick-ruling-on-patent-eligibility

Alice v. CLS Bank

- Established a two part test re patentability:

  - Is the claim directed to an "abstract idea?"

  - If so, is there any element or combination of elements sufficient to ensure that the claim amounts to significantly more than the abstract idea itself? i.e., is there an inventive concept?

Alice v. CLS Bank

- Examples of an Abstract Idea:
  - fundamental economic practices
  - certain methods of organizing human activities
  - an idea of itself
  - mathematical relationships/formulas

Alice v. CLS Bank

- Examples of an Inventive Concept:
  - improvements to another technology or technical fields
  - improvements to the functioning of the computer
  - Not just linking the use of an abstract idea to a particular technological environment
  - Not just using a generic computer to perform well-understood, routine and conventional activities previously known to the industry

No Bright Line Rule

***Amdocs (Israel) Limited v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016)**

- "[A] search for a single test or definition in the decided cases concerning § 101 from this court, and indeed from the Supreme Court, reveals that at present there is no such single, succinct, usable definition or test."

- "The problem with articulating a single, universal definition of 'abstract idea' is that it is difficult to fashion a workable definition to be applied to as-yet-unknown cases with as-yet-unknown inventions."

- This is still true today

- "Instead of a definition, then, the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen – what prior cases were about, and which way they were decided."

Inventive Concept Found

***Nasdaq, Inc. v. IEX Group, Inc.*, 2019 WL 102408 (D.N.J. 2019)**

- Court finds claims directed to solving a computer problem regarding the management and transmission of large quantities of data

- Claimed a specific technical method of computer operation to solve that problem as opposed to being directed at a "result or effect"

- Specifically, claim 1 described a "computer system for generating an update data set to be sent to remote terminals" using "memory," "a comparator connectable to the memory," and a "selector connectable to the memory."

- Court found this was not about the abstract concept of comparing first and second data sets for updating the data sets but was about allowing the **computer system** itself to more efficiently disseminate information.

Claims directed to similar technology can yield different results under *Alice* test

<u>Apple, Inc. v. Ameranth, Inc.</u>

- Relates to the Presentation of data on a Graphical User Interface

- Used algorithms to create menus to assist waiters in the food industry

- Implemented on generic hardware such as PDA's

- PATENT FOUND INVALID UNDER *ALICE*

- **<u>Trading Techs. Int'., Inc. v. CQG, Inc.</u>**

- Relates to the Presentation of data on a Graphical User Interface

- Used algorithms to create grids to assist commodities traders

- Implemented on generic hardware such as a desktop computer

- PATENT FOUND VALID UNDER *ALICE*

Why?

Apple, Inc. v. Ameranth, Inc., 842 F.3d 1229 (Fed. Cir. 2016)

- Both Parties' appeal PTAB findings that some claims were patentable and some were not

- Patents at issue include: U.S. Patent No. 6,384,850 (the "'850 Patent"), U.S. Patent No. 6,871,325 (the "'325 Patent"), and U.S. Patent No. 6,982,733 (the "'733 Patent").

- Fed. Cir. invalidates the patents. *Apple, Inc. v. Ameranth, Inc.*, No. 2015-1703, 2015-1704 (Fed. Cir., Nov. 29, 2016).

Apple, Inc. v. Ameranth, Inc.

- Patent claims directed to:

- "user-friendly and efficient generation of computerized menus for restaurants and other applications that utilize equipment with non-PC-standard graphical formats" '850 Patent at 2:49-55.
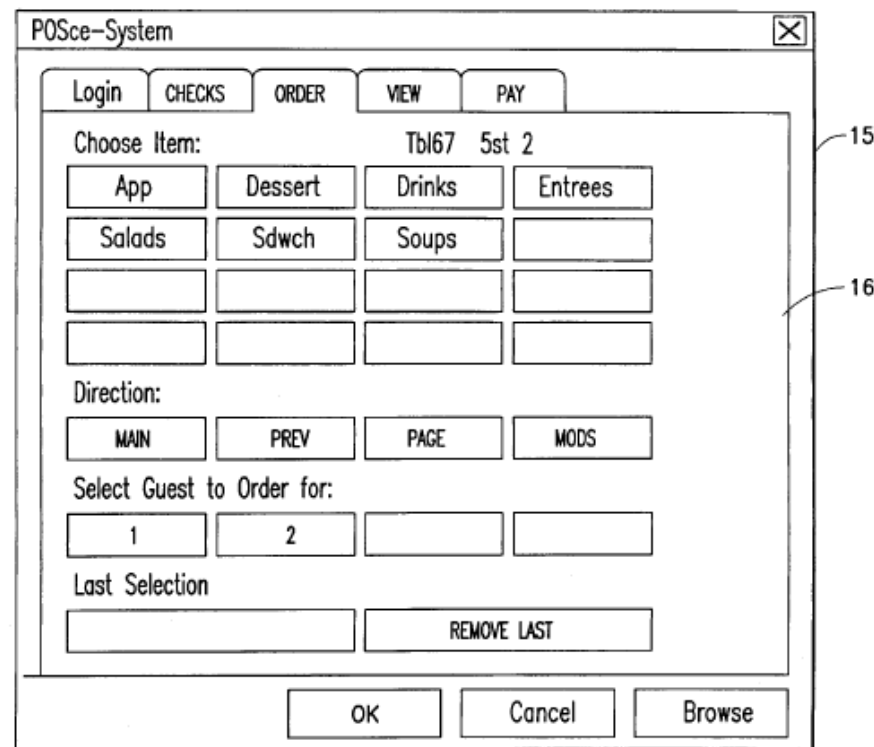

FIG.7

Apple, Inc. v. Ameranth, Inc.

1. An information management and synchronous communications system for generating and transmitting menus comprising:

    a. a central processing unit,

    b. a data storage device connected to said central processing unit,

    c. an operating system including a graphical user interface,

    d. a first menu consisting of menu categories, said menu categories consisting of menu items, said first menu stored on said data storage device and displayable in a window of said graphical user interface in a hierarchical tree format,

    e. a modifier menu stored on said data storage device and displayable in a window of said graphical user interface,

    f. a sub-modifier menu stored on said data storage device and displayable in a window of said graphical user interface, and

    g. application software for generating a second menu from said first menu and transmitting said second menu to a wireless handheld computing device or Web page, wherein the application software facilitates the generation of the second menu by allowing selection of catagories [sic] and items from the first menu, addition of menu categories to the second menu, addition of menu items to the second menu and assignment of parameters to items in the second menu using the graphical user interface of said operating system, said parameters being selected from the modifier and sub-modifier menus.

Apple, Inc. v. Ameranth, Inc.

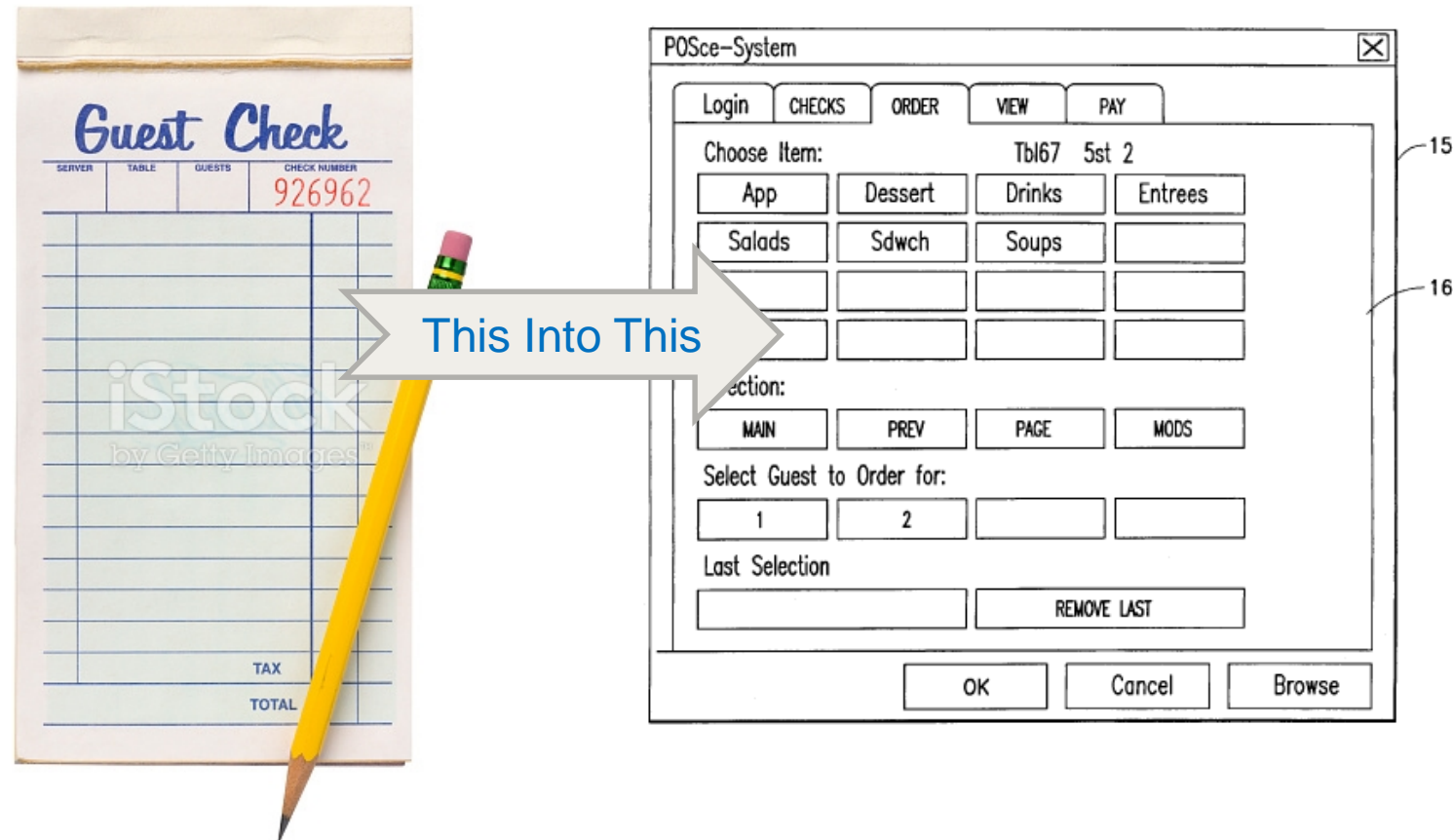- In other words, the patent used <u>complicated</u> algorithms to turn:

This Into This

FIG.7

Apple, Inc. v. Ameranth, Inc.

How is it implemented?

- "The procedure followed in configuring a menu on the desktop PC and then downloading the menu configuration onto the POS interface on the handheld device." '850 Patent at 6:22-25. In other words: Generic Hardware Components.

Apple, Inc. v. Ameranth, Inc.

How is it created?

- "When building a menu, it should be kept in mind that the menu items are stored using a tree metaphor similar to how files are stored on a PC with folds and subfolders. The menu structure is similar to the Windows File Explorer in the way the items are organized hierarchically. Below is an example of how an item may be configured. '850 Patent at 6:49-65. In other words: an algorithm.

Apple, Inc. v. Ameranth, Inc.

Why was this technology not patentable under *Alice* test?

1. **It's an Abstract Idea**

   a. Does not claim a particular way of programming or designing the software to create menus, just the resulting menu with certain features and downloaded information.

   b. Claims are not directed to a specific improvement in the way computers operate

Apple, Inc. v. Ameranth, Inc., No. 2015-1703, 2015-1704 (Fed. Cir., Nov. 29, 2016)

# *Apple, Inc. v. Ameranth, Inc.*

Why was this technology not patentable under *Alice* test?

2. There is no Inventive Concept

a. The claimed invention simply replaces a server's notepad or mental list with an electronic device programmed to allow menu items to be selected as customer places and order

b. The invention merely claims the addition of conventional computer components to well-known business practices…

c. "It is not enough to point to conventional applications and say 'do it on a computer.'"

Apple, Inc. v. Ameranth, Inc., No. 2015-1703, 2015-1704 (Fed. Cir., Nov. 29, 2016)

Techs. Int'l, Inc. v. CQG, INC., 675 F. App'x 1001 (Fed. Cir. 2017)
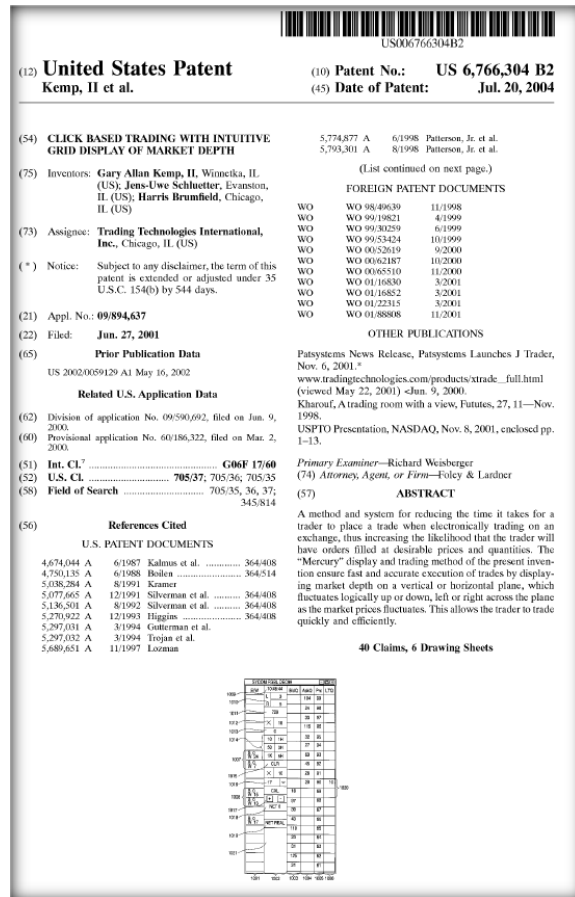
- Lower Court held that the asserted claims of U.S. Patents No. 6,772,132 ("the '132 patent") and No. 6,766,304 ("the '304 patent") recite patent-eligible subject matter in terms of 35 U.S.C. § 101.

- Fed. Cir. affirms the district court's decision. *See, Trading Technologies International, Inc. v. CQG, Inc.*, No. 2016-1616 (Fed. Cir., Jan. 18, 2017).

Trading Techs. Int'l, Inc. v. CQG, Inc.

Patent directed to:

- Market grid system where "[t]he values in the price column are static; that is, they do not normally change positions unless a [single click] re-centering command is received. The values in the Bid and Ask columns however, are dynamic; that is, they move up and down to reflect the market depth for the given commodity. *Id.* at 7:65-8:18.

- "On a trading screen… [there are] rapid changes in the price and quantity fields within the market grid." *Id.* at 2:60-61.

FIG. 3

Trading Techs. Int'l, Inc. v. CQG, Inc.

- In other words, the patent used <u>simple</u> algorithms to turn:

This Into This

Trading Techs. Int'l, Inc. v. CQG, Inc.

How is it implemented?

- "In the preferred embodiment, the present invention is implemented on a computer or electronic terminal." '304 Patent at 4:1-2.

- In other words: Generic Hardware Components.

Trading Techs. Int'l, Inc. v. CQG, Inc.

How is it created?

- "The present invention processes [] information and maps it through simple algorithms and mapping tables to positions in a theoretical grid program or any other comparable mapping technique for mapping data to a screen. The physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art. The present invention is not limited by the method used to map the data to the screen display." '304 Patent at 4:66-5:7. In other words: an algorithm.

Trading Techs. Int'l, Inc. v. CQG, Inc.

Why was this technology patentable under *Alice* test?

1. It's Not an Abstract Idea

    a. Claims do more than "setting, displaying, and selecting" data or information

    b. Rather claims solve a problem with prior art GUIs where traders could not use software efficiently

    c. Static Price Column allows traders to place orders at "a particular, identified price level"

Trading Techs. Int'l, Inc. v. CQG, Inc., No. 05-cv-4811, 2015 WL 774655 (N.D. Ill. Feb. 24, 2015) ("Dist. Ct. op."); *Trading Technologies International, Inc. v. CQG, Inc.*, No. 2016-1616 (Fed. Cir., Jan. 18, 2017).

Trading Techs. Int'l, Inc. v. CQG, Inc.

Why was this technology patentable under *Alice* test?

2. There is an Inventive Concept

   a. "[T]he '304 patent recites 'each location in the bid display region corresponding to a price level along **a common static price axis**." (emphasis retained).

   b. Static price axis was inventive concept because it allowed some traders the ability to more efficiently and accurately place trades on electronic trading systems

   c. Eliminated some problems related to prior GUIs with respect to speed, accuracy and usability. In other words, it solved a problem with the computer technology itself.

*Trading Techs. Int'l, Inc. v. CQG, Inc.*, No. 05-cv-4811, 2015 WL 774655 (N.D. Ill. Feb. 24, 2015) ("Dist. Ct. op."); *Trading Technologies International, Inc. v. CQG, Inc.*, No. 2016-1616 (Fed. Cir., Jan. 18, 2017).

Trading Techs. Int'l, Inc. v. CQG, Inc.

1. A method for displaying market information relating to and **facilitating trading of a commodity** being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising;

    *   **dynamically displaying a first indicator in one of a plurality of locations in a bid display region**, each location in the bid display region corresponding to a price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

    *   **dynamically displaying a second indicator in one of a plurality of locations in an ask display region**, each location in the ask display region corresponding to a price level along the common static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the lowest ask price currently available in the market;

    *   **displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis** such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the common static price axis;

    *   **displaying an order entry region** comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price axis; and

    *   **in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the commodity** and sending the trade order to the electronic exchange.

Trading Techs. Int'l, Inc. v. CQG, Inc.

- **dynamically displaying a first indicator in one of a plurality of locations in a bid display region**, each location in the bid display region corresponding to a price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

- **dynamically displaying a second indicator in one of a plurality of locations in an ask display region**, each location in the ask display region corresponding to a price level along the common static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the lowest ask price currently available in the market;

- **in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the commodity** and sending the trade order to the electronic exchange.
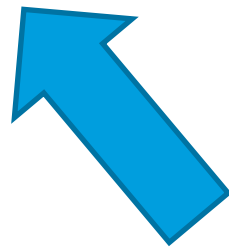
The claims are more clearly directed to **improving the GUI (and user's interaction with the GUI) itself** than claims in Apple case, which was just about creating a menu from real world data that could be implemented on any machine

What's the Takeaway When Drafting Claims?

- In TTI, the patent claims solved a particular problem with prior electronic systems whereas in Apple, the patent just replicated what could be done in the real world onto a computer

- In TTI, the patent claims improved the operation of the hardware ("speed, accuracy and usability") whereas in Apple there was no perceived improvement

- In TTI, the patent claims overcame a problem specifically arising in the realm of computers, not so in Apple

- The complexity of the disclosed algorithm does not matter, in TTI the patentee described its algorithm as "simple" whereas in Apple it was argued that the algorithm was complex.

  - "The degree of difficulty in implementing an abstract idea in this circumstance does not itself render an abstract idea patentable." *Apple, Inc. v. Ameranth, Inc.*, No. 2015-1703, 2015-1704 (Fed. Cir., Nov. 29, 2016).

How Could the Patent Claims in Apple Been Improved?

- Improve on menu system itself – something that could not be done in the real world

- Something beyond organizing menu selections, which could be done with a pen and paper

- For Example: Reformatting a PC menu interface into a PDA format = algorithm improves how the user interacts with the hardware and how the hardware understands the software

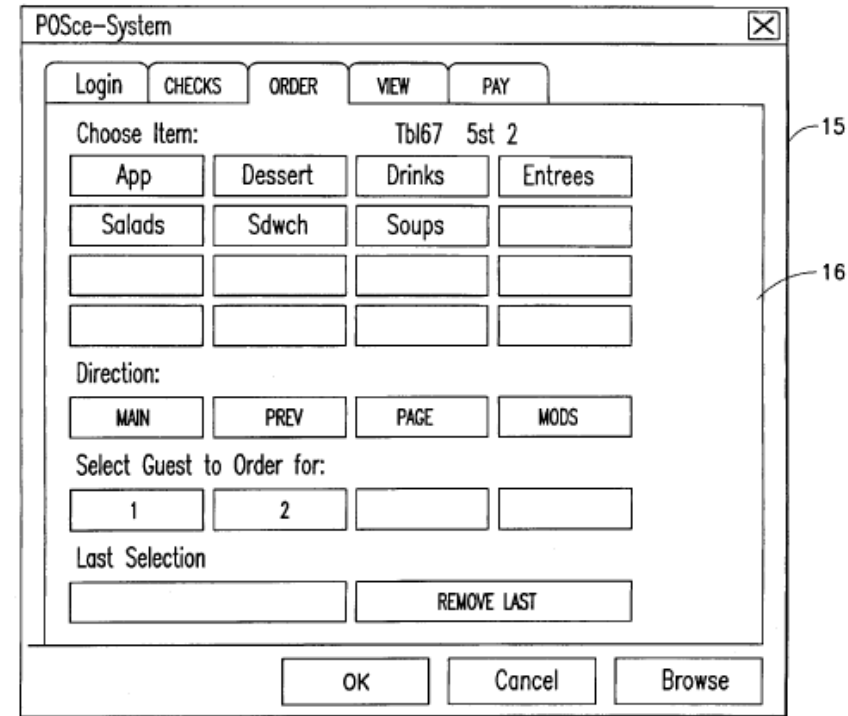- No bright line rule = this improvement would still likely be disputed

FIG.7

Questions?

WINSTON
& STRAWN
LLP

Thank You

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