

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IBG LLC,
INTERACTIVE BROKERS LLC, TRADESTATION GROUP, INC., and
TRADESTATION SECURITIES, INC.

Petitioner,

v.

TRADING TECHNOLOGIES INTERNATIONAL, INC.,
Patent Owner.

Case CBM2016-00031
Patent No. 7,813,996 B2

Before SALLY C. MEDLEY, MEREDITH C. PETRAVICK, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

Opinion for the Board filed by PETRAVICK, *Administrative Patent Judge*.

Opinion dissenting filed by PLENZLER, *Administrative Patent Judge*.

PETRAVICK, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

INTRODUCTION

A. Background

IBG LLC, Interactive Brokers LLC, TradeStation Group, Inc., and TradeStation Securities, Inc. (collectively, “Petitioner”) filed a Petition requesting covered business method patent review of claims 1–20 (the “challenged claims”) of U.S. Patent No. 7,813,996 B2 (Ex. 1001, “the ’996 patent”). Paper 2 (“Pet.”). Trading Technologies International, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 11 (“Prelim. Resp.”). On August 8, 2016, we instituted a covered business method patent review (Paper 15, “Institution Decision” or “Inst. Dec.”) based upon Petitioner’s assertion that claims 1–20 are directed to patent ineligible subject matter under 35 U.S.C. § 101. Inst. Dec. 24. Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 24, “PO Resp.”) and Petitioner filed a Reply (Paper 29, “Pet. Reply”) to Patent Owner’s Response. Pursuant to our authorization, Patent Owner filed an additional submission addressing the Federal Circuit’s holding in *Technologies International, Inc., v. CQG, Inc.*, No. 2016-1616, 2017 WL 192716 (Fed. Cir. Jan. 18, 2017) (“CQG”) (Paper 35) and Petitioner filed a reply to that submission (Paper 36). Petitioner filed a Motion to Exclude Evidence (Paper 37, “MTE”).

We held a joint hearing of this case and several other related cases on May 3, 2017. Paper 46 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown sufficiently that claims 1–20 of the ’996 patent are directed to patent ineligible subject matter under 35 U.S.C. § 101.

B. Related Proceedings

The parties indicate numerous related U.S. district court proceedings, including at least one proceeding specifically directed to the '996 patent. Pet. 2–3; Paper 7, 1–5.

Numerous patents are related to the '996 patent and the related patents are or were the subject of numerous petitions for covered business method patent review and reexamination proceedings. As noted above, the Federal Circuit has issued a non-precedential decision, *CQG*, which addresses whether claims of U.S. Patent Nos. 6,766,304 (“the '304 patent”) and 6,772,132 (“the '132 patent”) are patent eligible under § 101. The '996 patent at issue in this case is related to the '132 and '304 patents via continuation and divisional filings.

C. Asserted Grounds

Petitioner contends that the challenged claims are unpatentable under 35 U.S.C. § 101. Pet. 23–79.

D. The '996 Patent

The '996 patent is titled “Click Based Trading with Intuitive Grid Display of Market Depth.” Ex. 1001, [54]. The invention of the '996 patent “is directed to the electronic trading of commodities.” *Id.* at 1:14–15. The invention of the '996 patent is a graphical user interface (“GUI”), named the Mercury display, and a method of using the Mercury display to trade a commodity. *Id.* at Abstract, 3:3–8.

1. Conventional GUI

Before beginning our analysis of the claims for patent-eligibility, a discussion of conventional methods of trading is helpful. Figure 2 of the '996 patent depicts a GUI. Ex. 1001, Fig. 2 (“the Fig. 2 GUI”). According

to Patent Owner, the Fig. 2 GUI illustrates the “widely accepted conventional wisdom regarding” electronic trading. PO Resp. 10; *see also* Ex. 2169 ¶ 55 (“GUI tools like the example shown in Figure 2 were ubiquitous by the time of the invention.”).

Figure 2 of the ’996 patent is reproduced below.

FIG. 2

		201	202	203	204	205			
	Contract	Depth	BidQty	BidPrc	AskPrc	AskQty	LastPrc	LastQty	Total
1	CDHO	•	785	7626	7627	21	7627	489	8230
2			626	7625	7629	815			
3			500	7624	7630	600			
4			500	7623	7631	2456			
5			200	7622	7632	800			

The Fig. 2 GUI displays market information in columns. *See id.* at 5:15–42. BidQty column 202 displays bid quantity, and BidPrc column 203 displays corresponding bid price levels. *Id.* at 5:34–36. AskQty column 205 displays ask quantities, and AskPrc column 204 displays corresponding ask price levels. *Id.* at 5:36–38. The inside market (i.e., the best (highest) bid price and quantity and the best (lowest) ask price and quantity) is displayed in row one. *Id.* at 5:13–15. Rows 2–5 display the market depth, a list of next-best bids and asks. *Id.* at 5:18–19.

Prices and quantities change dynamically based on real time information from the market. *Id.* at 5:22–24. The inside market, however, is always displayed in row 1, a fixed location. PO Resp. 11. Christopher H. Thomas testifies that other prior art GUIs, which are similar to the Fig. 2 GUI, “displayed the locations for the best bid and ask prices such that the

prices were displayed vertically (*e.g.*, with the location for the best ask price being displayed above the location for the best bid price).” Ex. 2169 ¶ 56.

In the Fig. 2 GUI, “the user could place an order by clicking on a location (*e.g.*, a cell) in one of the price or quantity columns.” Ex. 2169 ¶ 52; *see* CBM2014-00133, Paper 18, 7–8. According to Patent Owner,

these types of tools permitted “single action” order entry that consisted of a trader presetting a default quantity and then clicking on a cell in the screen . . . to cause a trade order message to be sent to the exchange at the preset quantity and at the price value associated with that cell.

CBM2014-00133, Paper 18, 8.

Other types of conventional trading GUIs used order entry tickets to send trade orders to an electronic exchange. PO Resp. 10. An order entry ticket is “in the form of a window, with areas in which the trader could fill out parameters for an order, such as the price, quantity, an identification of the item being traded, buy or sell, etc.” Ex. 2169 ¶ 44; *see also* Ex. 1001, 2:35–45 (describing a trader manually entering trade order parameters).

2. Mercury Display

The Mercury display is depicted in Figure 3, which is reproduced below.

FIG. 3

SYCOM FGBL DEC99					
E/W	10:48:44	BidQ	AskQ	Prc	LTQ
L	3		104	99	
R	5		24	98	
	720		33	97	
×	10		115	96	
	0		32	95	
	10 1H		27	94	
	50 3H		63	93	
S 0 W 24	1K 5H		45	92	
S 0 W 7	CLR		28	91	
×	10		20	90	10
	17		18	89	
B 0 W 15	CXL		97	88	
B 0 W 13	+		30	87	
	NET 0		43	86	
B 0 W 17	NET REAL		110	85	
			23	84	
			31	83	
			125	82	
			21	81	

Figure 3 of the '996 patent illustrates an example of the Mercury display with example values for trading a commodity including prices, bid and ask quantities relative to price, and trade quantities.

The Mercury display is like the Fig. 2 GUI in that both display market information in columns. Column 1005 is a static price axis, which includes a plurality of price values for the commodity. See Ex. 1001 at 7:33–35. The '996 patent explains that “[t]he column does not list the whole prices (e.g. 95.89), but rather, just the last two digits (e.g. 89).” *Id.* at 7:35–36. Columns 1003 and 1004 are aligned with the static price axis and

dynamically display bid and ask quantities, respectively, for the corresponding price values of the static price axis. *See id.* at 7:33–47. The ’996 patent explains that “[t]he exchange sends the price, order and fill information to each trader on the exchange” and that “[t]he physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art.” *Id.* at 4:56–64.

The ’966 patent states that:

How far into the market depth the present invention can display depends on how much of the market depth the exchanges provides. Some exchanges supply an infinite market depth, while others provide no market depth or only a few orders away from the inside market. The user of the present invention can also chose how far into the market depth to display on his screen.

Id. 4:66–5:5.

Unlike the prior art Fig. 2 GUI, the values in the price column of the Mercury Display “are static; that is, they do not normally change positions unless a re-centering command is received.” *Id.* at 7:42–44. The bid quantities and ask quantities move up and down as the market changes, and, thus, the location of the inside market moves up and down. *See id.* at 7:44–46.

Similar to the prior art Fig. 2 GUI, a trader executes trades using the Mercury display by first setting the desired commodity and default parameters, such as default quantity. *Id.* at 8:64–9:11 and Fig. 6, step 1302. Column 1002 contains various parameters and information used to execute trades, such as the default quantity displayed in cell 1016. *See id.* at 7:65–8:32. A trader executes trades using the Mercury display by first setting the desired commodity and default parameters, such as default quantity. *See id.*

at 8:64–9:11; Fig. 6, step 1302. Then, a trader can send a buy order or sell order to the market with a single action, such as clicking on the appropriate cell in column 1003 or 1004. *See id.* at 9:46–11:36; Fig. 6, steps 1306–1315. For example, a left click on “20” in column 1004, shown in Figure 3, will send an order to the market to buy 17 lots (i.e., the default quantity set in cell 1016 of column 1002) at a price of 90. *See id.* at 9:52–54.

E. Illustrative Claim

As noted above, Petitioner challenges claims 1–20. Claim 1 is the sole independent claim, and is reproduced below:

1. A computer readable medium having program code recorded thereon for execution on a computer having a graphical user interface and a user input device, the program code causing a machine to perform the following method steps:

receiving market information for a commodity from an electronic exchange, the market information comprising an inside market with a current highest bid price and a current lowest ask price;

receiving an input from a user that designates a default quantity to be used for a plurality of trade orders;

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 static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the current highest bid price;

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 static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the current lowest ask price;

displaying the bid and ask display regions in relation to a plurality of price levels arranged along the static price axis such

that when the inside market changes, the price levels along the static price axis do not change positions and at least one of the first and second indicators moves in the bid or ask display regions relative to the static price axis;

displaying an order entry region aligned with the static price axis comprising a plurality of areas for receiving commands from the user input device to send trade orders, each area corresponding to a price level of the static price axis; and

receiving a plurality of commands from a user, each command sending a trade order to the electronic exchange, each trade order having an order quantity based on the default quantity without the user designating the default quantity between commands, wherein each command results from selecting a particular area in the order entry region corresponding to a desired price level as part of a single action of the user input device with a pointer of the user input device positioned over the particular area to both set an order price parameter for the trade order based on the desired price level and send the trade order to the electronic exchange.

Ex. 1001, 11:45–12:24.

ANALYSIS

A. Claim Construction

In a covered business method patent review, claim terms are given their broadest reasonable interpretation in light of the specification in which they appear and the understanding of others skilled in the relevant art. *See* 37 C.F.R. § 42.300(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144 (2016) (concluding the broadest reasonable construction “regulation represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office”).

Applying that standard, we interpret the claim terms of the ’996 patent according to their ordinary and customary meaning in the context of the

patent’s written description. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Petitioner proposes constructions for two claim limitations. Pet. 21–22. Patent Owner does not propose any explicit claim construction. For purposes of this Decision, we determine that no particular term requires explicit construction.

B. Covered Business Method Patent

Section 18 of the AIA¹ provides for the creation of a transitional program for reviewing covered business method patents. Section 18 limits review to persons or their privies who have been sued or charged with infringement of a “covered business method patent,” which does not include patents for “technological inventions.” AIA § 18(a)(1)(B), (d)(1); *see* 37 C.F.R. § 42.302. In compliance with 37 C.F.R. § 42.302(a), Petitioner certifies that it has been sued for infringement of the ’996 patent. Pet. 12.

Based on the record before us, we are apprised of no reason to change the determination in our Institution Decision that at least claim 1 of the ’996 patent is directed to a covered business method. Inst. Dec. 9–14.

1. “Method or Corresponding Apparatus for Performing Data Processing or Other Operations Used in the Practice, Administration or Management of a Financial Product or Service”

The statute defines a “covered business method patent” as

[a] patent that claims a method or corresponding apparatus for performing data processing or other operations used in the

¹ Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 329 (2011) (“AIA”).

practice, administration, or management of a financial product or service.

AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). A covered business method patent can be broadly interpreted to encompass patents claiming activities that are financial in nature. Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48734, 48735 (Aug. 14, 2012); *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1338–41 (Fed. Cir. 2016) (determining that a patent was a covered business method patent because it claimed activities that are financial in nature); *Unwired Planet, LLC v. Google, Inc.*, 841 F.3d 1376, n. 5 (Fed. Cir. 2016) (stating that “we endorsed the ‘financial in nature’ portion of the standard as consistent with the statutory definition of ‘covered business method patent’ in *Blue Calypso*”), *Versata Development Group, Inc. v. SAP America, Inc.*, 793 F.3d 1306, 1324–25 (Fed. Cir. 2015) (“[The statute] on its face covers a wide range of finance-related activities.”).

A patent need have only one claim directed to a covered business method to be eligible for review. 77 Fed. Reg. at 48,736 (Response to Comment 8). We take claim 1 as representative.

Petitioner contends that “the ’996 patent claims ***expressly require*** the performance of a financial transaction, e.g., by ‘receiving market information for a commodity,’ and ‘sending a trade order to the electronic exchange.’” Pet. 14 (citing claim 1 of the ’996 patent).

Patent Owner does not dispute that the claims are directed to a financial product or service and, instead, contends that the ’996 patent is not a covered business method patent because the claims are not directed to a

method for performing business operations. *See* PO Resp. 57–66; *id.* at 59 n. 3 (“CBMs include only claims to certain method for performing business operations”). Patent Owner contends that the claims of the ’996 patent are directed to a device and not a data process or business method claim. *Id.* at 61.

A covered business method patent is not limited to only patents that claim a method, as opposed to a device. Covered business method patents include a patent that claims “a method or corresponding apparatus.” AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). Claim 1 recites: “A computer readable medium having program code recorded thereon for execution on a computer having a graphical user interface and a user input device, the program code causing a machine to perform the following method steps.” Ex. 1001, 11:45–49. As Petitioner’s point out, claim 1 recites that the machine performs method steps, such as receiving market information, displaying indicators of the market information, and sending a trade order to the electronic exchange. Pet. 14. The specification of the ’966 patent discloses performing the method steps by processing information (i.e., data). *See* Ex. 1001, 4:58–62 (“[t]he present invention processes this information and maps it . . . to a screen.”); 10:58–60 (“[t]he process for placing trade orders using the Mercury display”).

Electronic trading is a financial service or activity. Tradable objects are financial products. A method of computing and displaying financial information for a tradable object on a graphical user interface for use in electronic trading is a method for performing data processing or other operations used in the practice, administration, or management of a financial

product or service. A computer readable medium having program code that causes a machine to perform such a method is a corresponding apparatus.

Patent Owner disputes that '996 patent claims data processing. PO Resp. 61–66. Patent Owner argues that the statute requires that the “data processing” cause a significant change in the data, and that data processing that merely displays the data, like the data processing disclosed in the '055 patent, is not significant. *Id.* Patent Owner’s argument is based upon the assumption that “data processing” in the statute is interpreted according to the definition of “data processing” found in the glossary for class 705 of the United States Patent Classification System. *See id* at 62. Patent Owner, however, does not sufficiently explain why this definition is controlling, as opposed to the plain meaning of “data processing.” We, thus, are not persuaded that “data processing” as recited by the statute precludes data processing for the purpose of displaying the data. As pointed out above, the '996 patent, itself, discloses processing market information received from an electronic exchange. Ex. 1001, 4:58–62, 10:58–60. We, thus, are not persuaded that the '966 patent does not claim “performing data processing . . . used in the practice, administration, or management of a financial product or service” (AIA § 18(d)(1)).

In any event, the statute does not limit covered business method patents to only those that claim methods for performing data processing used in the practice, administration, or management of a financial product or service. It includes methods for performing “other operations” used in the practice, administration, or management of a financial product or service. Patent Owner’s arguments imply that “other operations” must be “business operations.” *See e.g.*, PO Resp. 59, n. 3. The statute states that the “other

operations” are those that are “used in the practice, administration, or management of a financial product or financial service.” AIA § 18(d)(1). There appears to be no disagreement that the claimed method steps are operations used in the practice, administration, or management of a commodity or trading a commodity on an electronic exchange, e.g., a financial service. *See* PO Resp. 61–66. The ’996 patent, therefore, at least claims “other operations used in the practice, administration, or management of a financial product or financial service” (AIA § 18(d)(1)).

Patent Owner additionally contends that the Legislative History confirms that the claimed invention is not a covered business method. PO Resp. 70–72. We are not persuaded by Patent Owner’s argument. Although the legislative history includes certain statements that certain novel software tools and graphical user interfaces that are used by the electronic trading industry worker are not the target of § 18 of the AIA (*see* Ex. 2126, S5428, S5433), the language of the AIA, as passed, does not include an exemption for user interfaces for commodities from covered business method patent review. Indeed, “the legislative debate concerning the scope of a CBM review includes statements from more than a single senator. It includes inconsistent views” *Unwired Planet*, 841 F.3d at 1381. For example, in contrast to the statements cited by Patent Owner, the legislative history also indicates that “selling and trading financial instruments and other securities” is intended to be in the scope of covered business method patent review. *See* Ex. 2126, S5432 (statements of Sen. Schumer). “[T]he legislative history cannot supplant the statutory definition actually adopted. . . . The authoritative statement of the Board’s authority to conduct a CBM review is the text of the statute.” *Unwired Planet*, 841 F.3d at 1381. Each

claimed invention has to be evaluated individually to determine if it is eligible for a covered business method patent review. A determination of whether a patent is eligible for a covered business method patent review under the statute is made on a case-by-case basis. 37 C.F.R. § 42.301(b).

For the reasons stated above, and based on the particular facts of this proceeding, we conclude that the '996 patent "claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service" and meets that requirement of § 18(d)(1) of the AIA.

2. Exclusion for Technological Inventions

Even if a patent includes claims that would otherwise be eligible for treatment as a covered business method, review of the patent is precluded if the claims cover only "technological invention[s]," as defined by 37 C.F.R. §42.301(b). The definition of "covered business method patent" in § 18(d)(1) of the AIA does not include patents for "technological inventions."

To determine whether a patent is for a technological invention, we consider "whether the claimed subject matter as a whole [1] recites a technological feature that is novel and unobvious over the prior art; and [2] solves a technical problem using a technical solution." 37 C.F.R. § 42.301(b). The following claim drafting techniques, for example, typically do not render a patent a "technological invention":

- (a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012).

Both prongs must be satisfied in order for the patent to be excluded as a technological invention. *See Versata*, 793 F.3d at 1326–7; *Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016).

Petitioner first contends that rather than reciting a technical feature that is novel or unobvious over the prior art, the claims of the '996 patent generally recite trading software that is implemented on a conventional computer. Pet. 17–19. Petitioner additionally asserts that the claims of the '996 patent do not fall within § 18(d)(1)'s exclusion for “technological inventions” because the '996 patent does not solve a technical problem using a technical solution. *Id.* at 19–21. Patent Owner disagrees (PO Resp. 66–69), but fails to explain sufficiently how the *claimed* subject matter recites a technological feature that is novel and unobvious over the prior art or solves a technical problem using a technical solution.

We are persuaded by Petitioner's contentions that at least claim 1 of the '996 patent does not recite a novel and non-obvious technological feature. The specification of the '996 patent treats as well-known all potentially technological aspects of the claims. For example, the '996 patent discloses that its system can be implemented “on any existing or future terminal or device” (Ex. 1001, 4:2–5), each of which is known to include a display, and discloses that the input device can be a mouse (*id.* at 4:6–9),

which is a known input device. The '996 patent further discloses that “[t]he scope of the present invention is not limited by the type of terminal or device used.” *Id.* at 4:5–6. The '996 patent explains that the programming associated with the GUI is insignificant. *See, e.g.*, Ex. 1001, 4:58–65 (explaining that “present invention processes [price, order, and fill] information and maps it through simple algorithms and mapping tables to positions in a theoretical grid program” and “[t]he physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art”); *see also* PO Resp. 65 (“the claimed invention is agnostic to what specific algorithm is used for processing or mapping the data.”).

Given the above, we determine that claim 1 does not recite a technological feature that is novel and unobvious over the prior art. Because both prongs must be satisfied for a patent to be excluded from covered business method patent review for being a technological invention, we find that the '996 patent is eligible for a covered business method patent review for at least the reason that claim 1 fails to recite a technological feature that is novel and unobvious.

Notwithstanding our determination above, we also are persuaded by Petitioner that the '996 patent does not solve a technical problem with a technical solution.

Petitioner notes that the '996 patent “purports to minimize the risk of the market price changing before the trade is executed, such that the trader ‘misses the price.’” Pet. 19 (citing Ex. 1001, 2:55–57; 2:64–67). Petitioner argues that “contending with price fluctuations in a market is not a technological problem.” *Id.* at 19–20. Petitioner contends that “the '996

patent does not offer a technical solution” because “[i]t does not claim a more accurate mouse or a computer that responds faster.” *Id.* at 20.

Patent Owner contends that the ’996 patent solves the problem of a user missing an intended price because a price level changed as the user tried to click to send an order at an intended price level in a GUI tool. *See* PO Resp. 12 (citing Ex. 2169, 2195, 2212–2214, 2233, 2411, 2412, 2413).

Patent Owner’s argument is not persuasive. The problem of missing an intended price because the price changes just as a trader clicks on the price is not disclosed in the ’996 patent. The ’996 patent discloses that exchanges are volatile and move rapidly and that to profit a trader must react quickly. Ex. 1001, 2:1–2.

To profit in these markets, traders must be able to react quickly. A skilled trader with the quickest software, the fastest communications, and the most sophisticated analytics can significantly improve his own or his firm’s bottom line. The slightest speed advantage can generate significant returns in a fast moving market. In today’s securities markets, a trader lacking a technologically advanced interface is at a severe competitive disadvantage.

Id. at 2:2–10. According to the ’996 patent, approximately 80% of the total time it takes to place an order

is attributable to the time required for the trader to read the prices displayed and to enter a trade order. The present invention provides a significant advantage during the slowest portion of the trading cycle—while the trader manually enters his order.

Id. at 2:26–38. “The more time a trader takes entering an order, the more likely the price on which he wanted to bid or offer will change or not be available in the market” because “[t]he market is fluid as many traders are sending orders to the market simultaneously.” *Id.* at 2:45–49. “If a trader

intends to enter an order at a particular price, but misses the price because the market moved before he could enter the order, he may lose hundreds, thousands, even millions of dollars.” *Id.* at 2:55–58; *see also id.* at 3:1–5. “The inventors have developed the present invention which overcomes the drawbacks of the existing trading systems and dramatically reduces the time it takes for a trader to place a trade when electronically trading on an exchange.” *Id.* at 2:64–67.

As can be seen from the above, the problem disclosed in the ’996 patent is the time it takes for a trader to manually enter trader orders on a market or exchange that is rapidly changing, so as to make a profit. As Petitioner points out, this is a financial issue or a business problem, not a technical problem. Pet. 19–20. If the market or exchange did not rapidly change, then there would be no need for a trader to enter orders rapidly or for a GUI to accomplish such. We are persuaded by Petitioner that the ’996 patent does not solve a technical problem.

Further, as discussed above, claim 1 requires the use of only known technology, and we are persuaded by Petitioner that the ’996 patent does not provide a technical solution. Given this, we determine that at least claim 1 does not solve a technical problem using a technical solution and at least claim 1 does not satisfy the second prong of 37 C.F.R. § 42.301(b).

3. Conclusion

In view of the foregoing, we conclude that the ’996 patent is a covered business method patent under AIA § 18(d)(1) and is eligible for review using the transitional covered business method patent program.

C. Section 101 Patent-Eligible Subject Matter

Petitioner challenges claims 1–20 as directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 23–36. Patent Owner disagrees. PO Resp. 9–57.

Under 35 U.S.C. § 101, we must first identify whether an invention fits within one of the four statutorily provided categories of patent-eligibility: “processes, machines, manufactures, and compositions of matter.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–14 (Fed. Cir. 2014).

Initially, we note that Petitioner asserts that “claims 1–20 of the ’996 patent are invalid because they encompass subject matter that does not fall into any of the four statutory classes of § 101.” Pet. 35. Claims 1–20 recite a “computer readable medium having program code recorded thereon.” Petitioner contends that “the BRI of ‘medium,’ as used in claims 1–20 of the ’996 patent . . . is broad enough to cover substances ‘such as wires, air, or a vacuum’ through which transitory electrical signals can propagate.” *Id.* (citing *In re Nuijten*, 550 F.3d 1346, 1352 (Fed. Cir. 2007)); Pet. Reply 22–25. In our Institution Decision, we noted that our construction was preliminary and specifically indicated that “[t]he broadest reasonable interpretation, in light of the specification, of ‘recorded’ is an issue that requires further development of the record.” Inst. Dec. 9.

Patent Owner responds that there is no evidence to support Petitioner’s contention that one skilled in the art would have understood “computer readable medium having program code recorded thereon” to encompass a signal at the time of the invention. PO Resp. 56–57. Petitioner responds to Patent Owner’s contentions by simply asserting that “the Board

correctly found that under the BRI a ‘computer readable medium’ encompasses transitory media,” and that “[o]ther computer science definitions of the term confirm that ‘record’ does not imply storing on a physical device and, contrary to TT’s expert’s statements, is interchangeable with ‘encode.’” Pet. Reply 22–24.

Petitioner’s response is unhelpful. Petitioner cites to a single dictionary definition for a definition of just the term “record.” Ex. 1043, 3. Petitioner, however, fails to offer evidence or persuasive argument as to how one skilled in the art would have understood the phrase “computer readable medium having program code recorded thereon.” At oral hearing, when asked why no evidence was provided in this regard, Petitioner had no explanation other than “it would be difficult . . . because this is a term of art in the patent field” and “you can[not] go to an IEEE dictionary and find necessarily a dictionary definition that would be helpful here.” Tr. 71:4–10.

Accordingly, on this record, we are not persuaded by Petitioner that at the time of the invention one skilled in the art would have understood “computer readable medium having program code recorded thereon” as encompassing transitory, propagating signals.

Even if claims 1–20 fit within one of the categories of patent-eligibility, we are persuaded that claims 1–20 do not recite patent-eligible subject matter for the reasons that follow.

1. Eligibility

Patent-eligible subject matter is defined in § 101 of the Patent Act, which recites:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and

useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

There are, however, three judicially created exceptions to the broad categories of patent-eligible subject matter in § 101: laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012). Although an abstract idea, itself, is patent-ineligible, an application of the abstract idea may be patent-eligible. *Alice*, 134 S. Ct. at 2355. Thus, we must consider “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (citing *Mayo*, 132 S. Ct. at 1297–98). The claim must contain elements or a combination of elements that are “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Id.* (citing *Mayo*, 132 S. Ct. at 1294).

2. Abstract Idea

“The ‘abstract idea’ step of the inquiry calls upon us to look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); see also *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). “The § 101 inquiry must focus on the language of the Asserted Claims themselves.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016); see also *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013)

(admonishing that “the important inquiry for a § 101 analysis is to look to the claim”); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1346 (Fed. Cir. 2014) (“We focus here on whether the claims of the asserted patents fall within the excluded category of abstract ideas.”).

According to Petitioner, the challenged claims “are directed to the abstract, fundamental economic practice of trading based on displayed market information and user input.” Pet. 24. This is consistent with claim 1 of the ’996 patent. Claim 1 of the ’996 patent recites a “computer readable medium having program code recorded thereon for execution on a computer having a graphical user interface and a user input device” to perform various method steps involving market information. Ex. 1001, 11:45–49. Claim 1 recites two steps of displaying market information, bid and ask quantities, in regions along a static price axis. *Id.* at 11:56–67. The market information is an indicator of an order to buy at the highest bid price and an indicator of an order to sell at the lowest ask price. *Id.* In other words, the displayed market information is the inside market. Claim 1 does not require displaying any indicators other than those at the inside market or that the price axis display price levels other than those corresponding to the inside market. *See id.* at 4:64–5:5 (explaining the number of price levels displayed depends on the information provided and that some exchanges provide no market depth information). Claim 1 then recites a step of moving the market information along the price axis as the market changes. *Id.* at 12:1–7. Claim 1 finally recites a step of displaying an order entry region and a step of receiving user commands to set parameters for a trade order and send the trade order to an exchange. *Id.* at 12:8–24.

As can be seen from its steps, the focus of claim 1 is placing trade orders based on displayed market information (i.e., the inside market), as well as updating the market information. This focus is consistent with the '996 patent's statement that "[t]he present invention is directed to the electronic trading of commodities. . . . It facilitates the display of and the rapid placement of trade orders." *Id.* at 1:14–20. The focus of claim 1 is also consistent with the problem disclosed by the '996 patent, which is a trader missing an intended price because the market changed during the time required for a trader to read the prices displayed and to manually enter an order. *Id.* at 2:41–60.

Claim 1 does not recite any limitation that specifies how the computer implements the steps or functions for using a GUI. For example, claim 1 recites displaying an arrangement of the market information on the GUI. The bid quantities are displayed in the bid region at locations that correspond to prices along a static price axis and ask quantities are displayed in an ask region at locations that correspond to prices along the static price axis. *Id.* at 11:56–67. Claim 1 does not specify how the computer maps the bid quantities, ask quantities, and price axis to the display. The '996 patent also does not disclose an unconventional or improved method of mapping the bid quantities, ask quantities, and price axis to the display. It states that "[t]he physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art" and that "[t]he present invention is not limited by the method used to map the data to the screen display." *Id.* at 4:62–65; *see also* PO Resp. 65 ("the claimed invention is agnostic to what specific algorithm is used for processing or mapping the data.").

The '996 patent discloses that at least 60 exchanges throughout the world utilize electronic trading and discloses that it is known that electronic trading includes analyzing displayed market information and updated market information to send trade orders to an exchange. *See id.* at 1:24–2:60.

Similarly, Patent Owner's declarant, Mr. Thomas, indicates that traders in prior trading systems, including pre-electronic open outcry systems, which have been used for over one hundred years, send trade orders to an exchange based on price, such as the inside market prices or other prices. Ex. 2169 ¶¶ 30, 56, and 57. Mr. Thomas testifies that

[i]n the trading pit, traders utilize shouting and hand signals to transfer information about buy and sell orders to other traders. To avoid confusion, the inside market prices were the focus, and traders could only shout and signal regarding their interest at the best bid/offer or at a price that improves the best bid/offer.

Ex. 2169 ¶ 30. The '996 patent discloses that electronic exchanges are known to provide the market depth for display that is the inside market and a few orders away from the inside market. Ex. 1001, 4:66–5:5. Further, Exhibit 1020 discloses that long before the '996 patent, traders maintained books that plotted bids and asks (e.g., the market depth) along a price axis. *See* Ex. 1020, 44–46. Figure 4-2 of Exhibit 1020 is reproduced below.

FIGURE 4-2. A page in the specialist's book.

BUY		SELL
BKR R - 100	22	
BKR L - 300	1/8	
BKR A - 500		
BKR D - 200	1/4	
BKR E - 300		
	3/8	
	1/2	
	5/8	BKR F - 300
		BKR G - 600
	3/4	BKR B - 100
		BKR M - 200
	7/8	BKR S - 400

Figure 4-2 depicts a page of a book of a trader. *Id.* at 44–45. Orders to buy or sell a commodity are plotted along a prices axis. For example, Figure 4-2 shows the best bid at $22\frac{1}{4}$ and the best ask at $22\frac{5}{8}$. *Id.* at 44.

Given this, we determine that placing an order based on displayed market information, such as the inside market and few other orders, as well as updating the market information is a fundamental economic and conventional business practice.

The claims at issue here are like the claims at issue in *Affinity Labs*. In *Affinity Labs*, the claim at issue recited an application that enabled a cellular telephone to present a GUI displaying a list of media sources that included selectable items for selecting a regional broadcasting channel. *Affinity Labs*, 838 F.3d at 1255–56. The claim also recited that the cellular telephone was enabled to transmit a request for the selected regional broadcasting channel. *Id.* at 1256. The claims at issue here are also like the claims at issue in *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016). In *Ameranth*,

the claim at issue recited a GUI that displayed menu items in a specific arrangement, a hierarchical tree format. Menu items were selected to generate a second menu from a first menu. *Ameranth* 842 F.3d at 1234. In both *Affinity Labs* and *Ameranth*, the court determined that the claims were not directed to a particular way of programming or designing the software, but instead merely claim the resulting systems. The court thus determined that the claims were not directed to a specific improvement in the way computers operate. *Affinity Labs*, 838 F.3d at 1260–61; *Ameranth*, 842 F.3d at 1241. Here, the claims also recite the resulting GUI and are not directed to specific improvements in the way the computers operate. “Though lengthy and numerous, the claims [that] do not go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology” are patent ineligible. *Elec. Power Grp.*, 830 F.3d at 1351. “Generally, a claim that merely describes an ‘effect or result dissociated from any method by which [it] is accomplished’ is not directed to patent-eligible subject matter.” *Ameranth*, 842 F.3d at 1244 (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015)).

Claim 1 of the ’996 patent is unlike the claims at issue in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) and *Enfish*. In *DDR Holdings*, the court determined that the claims did not embody a fundamental economic principle or a longstanding commercial practice. The claims at issue in *DDR Holdings* were directed to retaining website visitors, which the court determined was a problem “particular to the

Internet.” *DDR Holdings*, 773 F.3d at 1257. The court also determined that the invention was “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” and that the claimed invention did not simply use computers to serve a conventional business purpose. *Id.* In *Enfish*, the claim at issue was directed to a data storage and retrieval system for a computer memory. *Enfish*, 822 F.3d at 1336–37. The court determined that the claims were directed to an improvement in the functioning of a computer and were not simply adding conventional computer components to well-known business practices. *Id.* at 1338. Here, in contrast, claim 1 is directed to a fundamental economic principle or a longstanding commercial practice and not directed to an improvement in the computer but simply to the use of the GUI in a method of placing an order based on displayed market information, as well as updating market information.

Further, claim 1 of the ’996 patent is unlike the claims at issue in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). In *McRO*, the court held that claims that recited “a specific asserted improvement in computer animation” were not directed to an unpatentable abstract idea because they go “beyond merely organizing existing information into a new form or carrying out a fundamental economic practice.” *McRO*, 837 F.3d at 135. Here, the claims merely organize existing market information. As discussed above, the claims merely reorganize market information so that the focus of a trader does not normally move.

We are persuaded by Petitioner that the Federal Circuit’s non-precedential decision in *CQG* is not controlling precedent in this proceeding.

See Pet. Reply 2–9; Paper 35, 1–5; Paper 36, 1–3. Petitioner was not a party in the suit involved in *CQG*, and *CQG* involved related but different patents. The Federal Circuit was not placed in a position to determine the merits of the Petitioner’s challenge to the patent eligibility of the claims under 35 U.S.C. § 101. Petitioner’s challenge to the patent eligibility of the claims is based on a construction of the claims and evidence submitted in this proceeding, such as different evidence of what was routine and conventional. See Pet. Reply 2–9 (discussing the differences between the records in *CQG* and here). The determination of whether the claims are patent eligible under 35 U.S.C. § 101 should focus on the record here. The patent-eligibility determination reached in *CQG* was based on the different record before the District Court.

Treating *CQG* as controlling of the patent-eligibility of claims 1–20, notwithstanding a different outcome based on the record developed in this proceeding involving a different party and relying on different evidence, in effect, treats *CQG* as precedential to the patent-eligibility question in this proceeding. The Federal Circuit did not in fact designate *CQG* as precedential. The presumption that *CQG* controls patent-eligibility of the claims, notwithstanding a possible different outcome based on a different set of facts and evidence, necessarily follows from the view that the question of patent-eligibility is a pure question of law. However, if the question of patent-eligibility is a question of law based on underlying facts, then underlying facts have the potential of controlling the ultimate determination. Likewise, a determination of obviousness under 35 U.S.C § 103 may depend on which prior art is applied against the claims. See *Novartis AG, LTS v. Noven Pharmaceuticals Inc.*, 853 F.3d 1289, 1293–94 (Fed. Cir. 2017) (“It

is unsurprising that different records may lead to different findings and conclusions.”).

3. Inventive Concept

To be patent eligible, a claim directed to an abstract idea must recite additional elements that constitute an inventive concept. *Alice*, 134 S. Ct. at 2357. One looks to “[t]he elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* at 2355 (quoting *Mayo*, 132 S. Ct. at 1297–98). The additional elements must be more than “well-understood, routine, conventional, activity.” *Mayo*, 132 S. Ct. at 1298.

Petitioner contends that claim 1 does not recite an inventive concept. Pet. 27–31; Pet. Reply 10–17. Patent Owner disagrees. PO Resp. 31–35.

First, claim 1 of the ’996 patent recites a “computer readable medium having program code recorded thereon for execution on a computer having a graphical user interface and a user input device” to perform various method steps involving market information. Ex. 1001, 11:45–49. The ’996 patent discloses that its system can be implemented “on any existing or future terminal or device” (*id.* at 4:2–5), which are known to include displays, and discloses that the input device can be a mouse (*id.* at 4:6–9), which is a known input device. A mere recitation of a GUI does not make the claim patent eligible. See *Affinity Labs*, 838 F.3d at 1257–58; *Ameranth*, 842 F.3d at 1236–1242; *Internet Patent Corp.*, 790 F.3d at 1348–1349; Pet. Reply 14–17. A recitation of a generic GUI merely limits the use of the abstract idea to a particular technological environment. “[L]imiting the field of use of the abstract idea to a particular existing technological environment does not

render the claims any less abstract.” *Affinity Labs*, 838 F.3d at 1259 (citing *Alice*, 134 St. Ct. at 2358; *Mayo*, 132 S. Ct. at 1294).

Second, claim 1 recites steps of displaying indicators representing a quantity associated with a highest order to buy the commodity or lowest order to sell the commodity in a bid display region or ask display region, respectively and moving the indicators upon receipt of market information. Ex. 1001, 11:56–12:7. Locations in the bid or ask display region correspond to a price level along a price axis. *Id.* Essentially, these limitations require plotting the inside market along a price axis. Plotting information along an axis is a well-understood, routine, conventional activity. See Ex. 1020, 44–46. The Fig. 2 GUI includes regions for displaying indicators of bid and ask quantities and regions for displaying corresponding prices. For example, the Fig. 2 GUI displays the bid quantity in BidQty column 202 at locations that correspond to the bid prices in BidPrc column 203. Ex. 1001, 5:17–22. This is akin to plotting information BidQty and AskQty along a price axis. Further, Mr. Thomas testifies that prior GUIs, which are similar to the Fig. 2 GUI, “displayed the locations for the best bid and ask prices such that the prices were displayed vertically (*e.g.*, with the location for the best ask price being displayed above the location for the best bid price).” Ex. 2169 ¶ 59; see also Ex. 1004, Fig. 2a (depicting a trading screen having a central order price column and ask and bid orders in adjacent corresponding columns). Displaying the best ask price above a best bid price would be displaying a common column of price levels. The ’996 patent states:

[T]he 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.

Ex. 1001, 4:62–65. These steps of claim 1 require merely a rearrangement of market information that was known to be displayed in corresponding columns on a GUI. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (holding “[t]he mere collection and organization of data” patent-ineligible).

Third, claim 1 also recites steps of displaying an order entry region for receiving commands to send trade orders, setting trade order parameters, and sending trade orders to the electronic exchange with a single action. Ex. 1001, 12:8–24. Methods that permit single action entry of an order, which has preset default parameters, by clicking on a cell in a display of a GUI are known technology. See Ex. 2169 ¶¶ 45, 52, 53. The additional elements must be more than “well-understood, routine, conventional activity.” *Mayo*, 132 S. Ct. at 1298.

The individual elements of the claim do not transform the nature of the claim into a patent-eligible application. They do not add significantly more to the abstract idea or fundamental economic practice. Contrary to Patent Owner’s argument, the claim simply recites the use of a generic GUI with routine and conventional functions. Even considering all of the elements as an ordered combination, the combined elements also do not transform the nature of the claim into a patent-eligible application. Indeed, as discussed above, the Fig. 2 GUI disclosed in the ’996 patent includes a similar combination of elements.

For the reasons discussed above, claim 1 of the ’996 patent are not directed to patent eligible subject matter under 35 U.S.C. § 101. We also have considered the other claims of the ’996 patent and, for similar reasons, the claims 2–20 are not directed to patent eligible subject matter.

D. Petitioner's Motion to Exclude

Petitioner moves to exclude various ones of Patent Owner's Exhibits. MTE 2–10. Because the outcome of this trial does not change based on whether or not we exclude those exhibits, we *dismiss* Petitioner's Motion to Exclude as moot.

CONCLUSION

For the foregoing reasons, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–20 of the '996 patent are patent-ineligible under 35 U.S.C. § 101.

ORDER

For the reasons given, it is:

ORDERED that claims 1–20 of the '996 patent are patent-ineligible under 35 U.S.C. § 101;

FURTHER ORDERED that Petitioner's Motion to Exclude Evidence is *dismissed*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IBG LLC,
INTERACTIVE BROKERS LLC, TRADESTATION GROUP, INC., and
TRADESTATION SECURITIES, INC.,
Petitioner,

v.

TRADING TECHNOLOGIES INTERNATIONAL, INC.,
Patent Owner.

Case CBM2016-00031
Patent No. 7,813,996 B2

Before SALLY C. MEDLEY, MEREDITH C. PETRAVICK, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*, dissenting.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

Although I agree that the '996 patent is directed to a covered business method, I do not join the majority in the determination that claim 1 does not solve a technical problem using a technical solution. Such a determination is not necessary for the '996 patent to be a covered business method patent, as we are persuaded that at least claim 1 of the '996 patent does not recite a technological feature that is novel and unobvious over the prior art. *See Versata dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1326–27 (Fed. Cir. 2015). With respect to the issue of claims 1–20 being patent-ineligible under 35 U.S.C. § 101, however, I respectfully dissent.

Under 35 U.S.C. § 101, we must first identify whether an invention fits within one of the four statutorily provided categories of patent-eligibility: “processes, machines, manufactures, and compositions of matter.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–14 (Fed. Cir. 2014). I agree with the majority that Petitioner has failed to establish sufficiently that at the time of the invention one skilled in the art would have understood “computer readable medium having program code recorded thereon” as encompassing transitory, propagating signals. Thus, the claims fit within one of the four statutorily provided categories of patent-eligibility.

Section 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank. Int’l*, 134 S. Ct. 2347, 2354 (2014) (citing *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)). In *Alice*, the Supreme Court reiterated the framework set forth previously in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and

abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.*

There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent-eligible under § 101, “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”).

The Federal Circuit issued a decision determining that the claims from U.S. Patent Nos. 6,766,304 (“the ’304 patent”) and 6,772,132 (“the ’132 patent”) are patent eligible under § 101. *Trading Techs. Int’l, Inc. v. CQG, Inc.*, No. 2016-1616, 2017 WL 192716 (Fed. Cir. Jan. 18, 2017) (“CQG”). More specifically, the Federal Circuit determined that the claims in the ’304 and ’132 patents are not directed to an abstract idea. *Id.* at *3. By virtue of a number of continuation filings, U.S. Patent No. 7,813,996 (Ex. 1001, “the ’996 patent”) is ultimately a continuation of the application resulting in the ’132 and ’304 patents (Application No. 09/590,692).²

² The ’304 patent resulted from a divisional filing of that application.

In a related Board proceeding addressing the '304 and '132 patents, we followed the guidance from the Federal Circuit decision noted above and determined the claims in those patents to be patent eligible. CBM2015-00161, Paper 129, slip op. at 4–6 (PTAB February 17, 2017); CBM2015-00182, Paper 129, slip op. at 18, 53–54 (PTAB February 28, 2017). The claims at issue before us are remarkably similar to those in the '304 and '132 patents. The claims are perhaps closest to those in the '304 patent, and with respect to the question of whether the claims before us are directed to an abstract idea, there is no meaningful difference between the claims in the '996 patent and those in the '304 patent. Claim 1 from the '304 patent and claim 1 from the '996 patent are reproduced below, with highlighting to illustrate the similarities.

CBM2016-00031
Patent 7,813,996 B2

CBM2016-00031 (US 7,813,996)

1. A computer readable medium having program code recorded thereon for execution on a computer having a graphical user interface and a user input device, the program code causing a machine to perform the following method steps:

receiving market information for a commodity from an electronic exchange, the market information comprising an inside market with a current highest bid price and a current lowest ask price;

receiving an input from a user that designates a default quantity to be used for a plurality of trade orders;

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 static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the current highest bid price;

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 static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the current lowest ask price;

displaying the bid and ask display regions in relation to a plurality of price levels arranged along the static price axis such that when the inside market changes, the price levels along the static price axis do not change positions and at least one of the first and second indicators moves in the bid or ask display regions relative to the static price axis;

displaying an order entry region aligned with the static price axis comprising a plurality of areas for receiving commands from the user input device to send trade orders, each area corresponding to a price level of the static price axis; and

receiving a plurality of commands from a user, each command sending a trade order to the electronic exchange, each trade order having an order quantity based on the default quantity without the user designating the default quantity between commands, wherein each command results from selecting a particular area in the order entry region corresponding to a desired price level as part of a single action of the user input device with a pointer of the user input device positioned over the particular area to both set an order price parameter for the trade order based on the desired price level and send the trade order to the electronic exchange.

CBM2015-00161 (US 6,766,304)

1. A method of displaying market information relating to and facilitating trading of a commodity being traded on 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.

The illustration above clearly shows that claim 1 from the '996 patent is virtually identical to claim 1 of the '304 patent. At oral hearing, when asked what limitations are missing from claim 1 of the '996 patent, counsel for Petitioner could not identify even one. Tr. 10:11–22. As noted above, the Federal Circuit already determined the claims of the '304 patent are not directed to an abstract idea and we followed that guidance in our earlier decision addressing that patent. With respect to the question of whether the claims before us are directed to an abstract idea, I would follow the Federal Circuit's guidance from *CQG*, as we did in

CBM2016-00031
Patent 7,813,996 B2

CBM2015-00161, because claim 1 of the '996 patent is of the same, or narrower scope, as claim 1 of the '304 patent.

Accordingly, I would determine that claims 1–20 of the '996 patent are eligible under § 101 because they are not directed to an abstract idea.

PETITIONER:

John Phillips
Kevin Su
FISH & RICHARSON P.C.
CBM41919-0004CP1@fr.com
PTABInbound@fr.com

Michael Rosato
WILSON SONSINI GOODRICH & ROSATI
mrosato@wsgr.com

PATENT OWNER:

Leif Sigmond
Cole Richter
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
sigmond@mbhb.com
richter@mbhb.com