UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte VINCENT P. ANNUNZIATA,
DAVID EHRLICH,
PAUL SUMMERMATTER,
ERIC M. HERMANSON,
and JOHN ROWLAND

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Appeal 2015–000548
Application 12/893,690
Technology Center 3600

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Before ANTON W. FETTING, MICHAEL C. ASTORINO, and
AMEE A. SHAH, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Vincent P. Annunziata, David Ehrlich, Paul Summermatter, Eric M.

Hermanson, and John Rowland (Appellants) seek review under

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[1] Our decision will make reference to the Appellants' Appeal Brief ("App.
Br.," filed April 8, 2014) and Reply Brief ("Reply Br.," filed October 6,
2014), and the Examiner's Answer ("Ans.," mailed September 9, 2014), and
Final Action ("Final Act.," mailed March 27, 2014).

35 U.S.C. § 134 of a final rejection of claims 36–45 and 53–92.[2] We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellants invented a way of providing real–time market data, including full depth of market information, and trading functionality to users via mobile communication devices and/or computer systems. Specification para. 1.

An understanding of the invention can be derived from a reading of exemplary claim 56, which is reproduced below (bracketed matter and some paragraphing added).

> 56. A method comprising:
>
> [1] providing a server system comprising one or more computing devices,
>
> > said server system in communication with one or more financial exchange computers and one or more data source computer devices;
>
> [2] receiving at said server system live market data and information
>
> > from at least one of said financial exchange computers and at least one of said data source computer devices;
>
> [3] aggregating said live market data and information;
>
> [4] filtering said live market data and information;
>
> and
>
> [5] transmitting the aggregated and filtered live market data and information to one or more mobile communication devices in communication with said server system,

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[2] Claims 1–35 and 46–52 have been withdrawn and are not on appeal.

said one or more mobile communication devices
simultaneously displaying, via one or more interactive
graphic user interfaces (GUIs), the aggregated and
filtered data and information on a single display screen.

The Examiner relies upon the following prior art:

Jokisch   US 2005/0149426 A1   July 7, 2005
Ram   US 2006/0069635 A1   Mar. 30, 2006

Claims 36–45 and 53–92 stand rejected under 35 U.S.C. § 101 as
directed to non–statutory subject matter.

Claims 36–45 and 53–92 stand rejected under 35 U.S.C. § 103(a) as
unpatentable over Ram and Jokisch.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims
are directed to an abstract idea and do not add significantly more. The issues
of obviousness turn primarily on whether the art applied describes the
manner of client-server processing recited in the claims.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are supported by a
preponderance of the evidence.

Facts Related to the Prior Art

Ram

01.   Ram is directed to buying or selling items having at least one active market, and a user interface to facilitate the same. Ram para. 1.

02.   Ram describes configuring a user interface for the buying and selling of items, such as securities. The user interface is preferably connected to a source of real–time market information, which provides the content for the interface. The interface itself is most preferably a form of graphical display, which presents the market information in a user friendly and visual form to facilitate the use of the information by the user. Most preferably, the graphical display permits the information to be displayed in real–time, with graphical representations on a grid corresponding to quantitative aspects of the information. Ram para. 43.

03.   Ram describes its Fig. 15 as similar to Fig. 13, with a right click menu activated for the buy order. The pop-up menu is location and context sensitive, and allows the user to view order statistics, change order parameters, adjust price axis increments, set preferences, display an aggregate column, cancel an order, and the like. Ram para. 225.

04.   Ram describes its Fig. 19 as an alternative Grid Proper configuration. Each row presents five distinct price cells. Prices progress higher along the price axis from bottom to top, and from

left to right. Such a Grid Proper arrangement may be used to represent a single market, or an aggregate market view of one or more markets for a given security. Ram para. 231.

05. Ram describes filtering its data. Ram para. 237.

06. Ram describes its expanded price range view of the security as being adapted to display aggregate or specific market data by selection process. Ram para. 273.

07. Ram describes a horizontal filter as one if its technical indicator analysis tools. Ram para. 611.

Jokisch

08. Jokisch is directed to calculating an enhanced volume-weighted average price, and more particularly to trading systems that allow traders to place orders on average price contracts based on trades, bids, and offers. Jokisch para. 2.

09. Although the electronic trading application is described by Jokisch as being implemented on user computer equipment, this is only illustrative. The electronic trading application may be implemented on any suitable platform (e.g., personal computer, palmtop computer, laptop computer, personal digital assistant, cellular phone, etc.) to provide such features. Jokisch para. 59.

ANALYSIS

Claims 36–45 and 53–92 rejected under 35 U.S.C. § 101 as directed to non–statutory subject matter

The Examiner finds the claims directed to the abstract idea of a server system comprising one or more computing devices. Ans. 3. We are persuaded by Appellants' argument that a server system having computing devices falls squarely within the definition of a "machine" under § 101. Reply Br. 3. Whatever else, a server per se is not an abstraction. That said, we find the claims are actually directed to the abstract conceptual idea of analyzing market data, which is an abstraction. Thus, we reverse the Examiner and enter a new rejection under *35 U.S.C. § 101*.

The Supreme Court

> set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent–eligible applications of those concepts. First, [] determine whether the claims at issue are directed to one of those patent–ineligible concepts. [] If so, we then ask, "[w]hat else is there in the claims before us? [] To answer that question, [] 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. [The Court] described step two of this analysis as a search for an "'inventive concept'"—*i.e.,* an element or combination of elements that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."

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Alice Corp., Pty. Ltd., v CLS Bank Int'l, 134 S.Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we find that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed.

The preamble to method claim 56 does not recite what it is directed to, but the steps in claim 56 result in displaying aggregated, filtered market data. The Specification at paragraph 1 recites that the invention relates to providing real-time market data, including full depth of market information, and trading functionality to users. Thus, all this evidence shows that claim 56 is directed to market data analysis, i.e., financial analysis.

It follows from prior Supreme Court cases, and *Bilski* (*Bilski v Kappos*, 561 U.S. 593 (2010)) in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of financial analysis is a fundamental business practice long prevalent in our system of commerce. The use of market data analysis is also a building block of the centuries old securities markets. Thus, financial analysis, like hedging, is an "abstract idea" beyond the scope of § 101. *See Alice Corp. Pty. Ltd.* at 2356.

As in *Alice*, we need not labor to delimit the precise contours of the "abstract ideas" category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of risk hedging in *Bilski* and the concept of financial analysis at issue here. Both are squarely within the realm of "abstract ideas" as the Court has used that term. *See Alice Corp. Pty. Ltd.*at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. LLC, v. Alstom S.A.,* 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent-ineligible concept"); *see also In re TLI Commc'ns LLC Patent Litig.,* 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC, v. Iatric Sys., Inc.,* 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 56, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data collection, analysis, and transmittal and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.,* 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they "focused on a specific asserted improvement in computer animation"). As such, claim 56 is directed to the abstract idea of receiving, analyzing, and transmitting data.

The remaining claims merely describe parameters used in transmission and analysis. We conclude that the claims at issue are directed to a patent-ineligible concept.

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The introduction of a computer into the claims does not alter the analysis at *Mayo* step two.

> the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea "while adding the words 'apply it'" is not enough for patent eligibility. Nor is limiting the use of an abstract idea "'to a particular technological environment.'" [] Stating an abstract idea while adding the words "apply it with a computer" simply combines those two steps, with the same deficient result. Thus, if a patent's recitation of a computer amounts to a mere instruction to "implement[t]" an abstract idea "on . . . a computer," that addition cannot impart patent eligibility. This conclusion accords with the pre-emption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of "additional featur[e]" that provides any "practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself."

Alice Corp. Pty. Ltd., 134 S.Ct. at 2358 (citations omitted).

"[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea [] on a generic computer." *Alice Corp. Pty. Ltd.,* 134 S.Ct. at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to receive, aggregate, filter, display, and transmit data amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. In short, each step

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does no more than require a generic computer to perform generic computer functions. To be sure, the claims recite doing so by advising one to aggregate and filter data and send the results to single display. But this is no more than abstract conceptual advice on the parameters for such analysis and the generic computer processes necessary to process those parameters, and do not recite any particular implementation.

Considered as an ordered combination, the computer components of Appellants' method add nothing that is not already present when the steps are considered separately. Viewed as a whole, Appellants' method claims simply recite the concept of financial analysis as performed by a generic computer. The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The 31 pages of the Specification spell out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of market data analysis under different scenarios. The closest they come to describing particular implementations is in characterizing the parameters of the GUI display window, which pertains more to visual design than computer functionality. *Cf. Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241–42 (Fed. Cir. 2016) (concluding that generating menus on a computer performed by typical hardware elements and commonly known software programming was patent-ineligible). They do not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of financial analysis using some

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unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.* at 2360.

As to the structural claims, they

> are no different from the method claims in substance. The
> method claims recite the abstract idea implemented on a generic
> computer; the system claims recite a handful of generic
> computer components configured to implement the same idea.
> This Court has long "warn[ed] ... against" interpreting § 101"in
> ways that make patent eligibility 'depend simply on the
> draftsman's art.'

Alice Corp. Pty. Ltd. at 2360.

Claims 36–45 and 53–92 rejected under 35 U.S.C. § 103(a) as unpatentable over Ram and Jokisch

We are persuaded by Appellants' argument that Ram fails to disclose or suggest aggregating the live market data and information from multiple sources at a server system that is separate and apart from a mobile communication device. The Examiner applies Ram for the data retrieval and analysis and Jokisch for the mobile device. Jokisch describes using the mobile device as an alternative to a computer as the sole platform. Neither reference describes performing the analysis on a server and then transmitting the results for display to a mobile device. The Examiner does not make findings as to this in the Answer's Response section.

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CONCLUSIONS OF LAW

The rejection of claims 36–45 and 53–92 under 35 U.S.C. § 101 as directed to non-statutory subject matter is improper under the Examiner's reasoning, but the rejection is again entered as a new ground under newly described reasoning.

The rejection of claims 36–45 and 53–92 under 35 U.S.C. § 103(a) as unpatentable over Ram and Jokisch is improper.

DECISION

The rejections of claims 36–45 and 53–92 are reversed.

A new ground of rejection of claims 36–45 and 53–92 under 35 U.S.C. § 101 is entered.

Our decision is not a final agency action.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." Section 41.50(b) also provides:

> When the Board enters such a non–final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:
>
> (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating

to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or new Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

<u>REVERSED; 41.50(b)</u>