Commissioner=s Decision # 1355

Décision du Commissaire # 1355

TOPIC: J-00, J-10

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Application No: 2,493,971

Demande no: 2,493,971

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application 2,493,971, having been rejected by the Examiner under subsection 30(3) of the *Patent Rules*, was reviewed by the Patent Appeal Board and by the Commissioner of Patents. The recommendation of the Board and the decision of the Commissioner are as follows:

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Introduction

1. This decision deals with a review of the findings of the examiner in respect of Canadian patent application No. 2,493,971, entitled A*Automated Auction Protocol Processor*@, filed on 3 December 1997 and currently assigned to CFPH LLC; Cantor Fitzgerald, L.P. The application pertains to a computerized open outcry auction system such as used in fixed income trading wherein a trader is provided a Asecond look@ in which they may alter their bid or offer in light of a recent change in the auction circumstances.

2. The examiner in charge issued a Final Action (FA) to the applicant on 7 April 2009, rejecting the application for lacking statutory subject matter. Having found that the applicant=s response to the FA did not overcome the defects, the examiner forwarded the application and a Summary of Reasons (SOR) to the Patent Appeal Board (Athe Board@) on 29 September 2011. The SOR maintained the rejection of the application on the same grounds identified in the FA, but added new grounds for rejection based on lack of support under section 84 of the *Patent Rules*. The SOR was forwarded to the applicant, along with an invitation to be heard.

3. In early 2013, in view of the decision of the Federal Court of Appeal in *Canada (Attorney General) v. Amazon.com Inc.*, 2011 FCA 328 [*Amazon*], the Office released two practice notices regarding purposive construction and statutory subject matter. In June 2013, a panel of three PAB members was formed (Athe panel@) and requested a Supplemental Analysis (SA) from the examiner to update the grounds for rejection on the basis of a purposive construction of the claims. The SA was sent to the applicant on 28 June 2013.

4. The applicant responded to the SA with written submissions in advance of a hearing on the application, which was held before the panel on 20 September 2013.

5. At the conclusion of the above prosecution, two issues remain before the panel for determination in this recommendation:

   $ Are claims 1 to 58 directed to non-statutory subject matter and therefore non-compliant with section 2 of the *Patent Act*? and
   $ Are claims 1, 3 to 8, 10 to 18, 25 to 37, 43 to 46, and 48-57 broader than the description and drawings and thus non-compliant with section 84 of the *Patent Rules*?

[3] For the reasons that follow, we find that the rejection of the application on the grounds of lack of statutory subject matter ought to be sustained, and is thus sufficient to dispose of the application. We therefore need not decide on the second issue. However, based on our review and construction of the claims (below), we would have found that the grounds of rejection on the basis of section 84 of the *Patent Rules* would have been reversed.

Background

[4] The application pertains to methods and associated systems for conducting an open bid or open outcry auction process, including the provision of a Asecond look state@. As discussed in the Background of the application (pages 2-5), an open outcry auction is a well known trading method which brings buyers and sellers together, traditionally in one location, and often with a broker or auctioneer conducting the auction. Bids are placed verbally by numerous buyers until the item is sold to the highest bidder, which establishes a market price for the item.

[5] Early open outcry auctions sold items such as furniture, art or durable goods. Over time, open outcry auctions were modified for use in financial commodities and contracts trading, including fixed income securities such as bonds and Treasury Bills. Such trading environments entail many participants with high volumes trading at a fast pace.

[6] The second look state is an additional auction process designed to discriminate a very recent change in a transaction (e.g. additional volume) by a second participant after a first participant has already agreed to the original transaction. This allows the first participant an opportunity to either accept, refuse or modify their pending transaction, even after they already indicated its acceptance. One might consider the second look as a mechanism to Aback out@ of a committed transaction that the buyer/seller may not have intended or wanted to accept. In this way, the recent position change does not necessarily hinder or financially disadvantage the trader.

[7] The feature of the second look step is further understood in view of the claimed invention: claim 1 is representative of the proposed method implemented on a computerized auction system:

> 1. A method implemented by a programmed computer system for trading a volume of an item between participants, comprising:
>
> a) providing a bid/offer system state to enable participants to enter into the system bids and offers at select prices and volumes for the item;
>
> b) presenting the bids and offers to the participants;
>
> c) receiving a first hit or lift trade command from a first participant, responding to presented bids and offers, to transact a trade of a desired volume of the item at a desired price;
>
> d) in response to the first trade command, transitioning from the bid/offer system state to a trading system state to transact a trade of the item at a defined price corresponding

to the desired price, and to transact in response to an additional trade command a trade of an additional volume of the item at the defined price; and

e) if a bid or offer hit or lifted by the first trade command has not aged, transitioning to a second look system state to enable the first participant to refuse to trade at least a portion of the volume of the item associated with the unaged bid or offer.

[8] In steps a) and b), a bid/offer state is provided for presenting and receiving bids and offers between participants, as is common to many auction methods. In step c), an auction process receives a first hit or lift trade command from a first participant (the market Aaggressor@) for a volume and price of an item. A Ahit@ command is a command to accept a pending bid, while a Alift@ command is one to accept a pending offer. Following this step, in the first part of step d), the process transitions to a trade state, in which the above transaction is completed with the first participant at the volume and price bid. If nothing else has changed within a set time period, this would conclude that particular trade.

[9] Step d) further defines the situation wherein an additional trade command has been introduced into the current auction process. This second trade command places additional volume into the bid (or offer) transaction. The first participant may not have been aware of the additional volume when they placed the hit (or lift) for the first trade command, since the second trade command was introduced immediately prior to the first participant making their hit (or lift).

[10] As a result, in step e), the auction process transitions to a second look state in order to address this additional trade volume, if it occurs within a certain time period from the first trade command (i.e. if the first command Ahas not yet aged@). While in the second look state, the aggressor may choose to refuse at least a portion of the additional volume. This

provides the option for the aggressor to modify a transaction that was unintended and which resulted from a recent change.

Issue: *Are claims 1 to 58 directed to non-statutory subject matter and thus non-compliant with section 2 of the Patent Act?*

[11] In *Amazon*, the Court addressed the issue of identifying statutory subject matter in patent applications, and observed (at para. 43) that during examination Supreme Court jurisprudence requires the Commissioner=s identification of the actual invention to be grounded in a purposive construction of the patent claims. Therefore, before we address the issue before us, the panel first must consider the purposive construction of claims 1-58.

[12] As illustrated in claim 1 above, the claimed invention involves an auction process, defined by one or more states implemented on various computer components. Our construction in the following paragraphs determined whether or not these computer-related components are essential to the claimed invention. Having found these components to be non-essential (see para. 55, below), we need not fully construe the additional elements of the claims pertaining to the auction process, since we are able to reach a conclusion on the issue of statutory subject matter regardless.

Purposive Construction:

Overview

[13] As noted earlier, the Office issued two practice notices in early 2013 in view of the decision of *Amazon*. Practice Notice 2013-02 *AExamination Practice Respecting Purposive Construction@* dated 8 March 2013 *[PN2013-02*] provides guidance on performing a purposive construction of claims based on the direction found in *Amazon*. Practice Notice 2013-03 A*Examination Practice*

Respecting Computer-Implemented Inventions@ dated 8 March 2013 [*PN2013-03*] provides an update on the determination of statutory subject matter for computer related applications in light of purposively construed claims. The practice notices are issued to employees on direction of the Commissioner of Patents. Both notices also serve to inform applicants and inventors of the Office=s interpretation of the jurisprudence on these two topics.

[14] As summarized in PN2013-02, purposive construction for a patent application determines the meaning of terms used in the claims and determines which elements of a claim are essential to the invention. Purposive construction is performed through a balanced and informed approach, considering the specification as a whole against the background of the common general knowledge (CGK), including an understanding of the problem and solution addressed by the application. Once identified, the solution then informs the determination of which elements are essential to the claimed invention. While some elements in a claim may have a material effect on the operation of the embodiment defined by the claim, they may not be essential (i.e. they may be omitted or varied) to the operation of the invention in achieving the solution to the problem.

[15] The applicant submitted that the examiner was incorrect to ignore the primacy of claim language and instead focus on some Aactual invention@ which excludes some elements explicitly recited in the claims. The applicant submits that it is incorrect to simply strip-out features from the claims; an informed purposive construction in the applicant=s view would presume that the inventor=s desire to claim certain elements means they are presumed to be essential, and cannot be omitted.

[16] As Office practice acknowledges, purposive construction is anchored in the language of the claims; however, as cautioned in *Amazon* (para 43), our determination of the invention cannot be based solely on a literal reading of the claims. An element

is not automatically considered essential by its mere presence in the language of the claim as drafted by the inventor. Such an approach would ignore the guidance of the FCA in *Amazon*. The panel does not agree with the applicant that the intent of the applicant is an overriding factor in whether or not an element is essential (see PN2013-02, footnote 19). Instead, as the practice notice indicates, we may determine whether or not an element is essential in view of whether or not it may be varied or omitted without a material effect on the invention. An element can be considered non-essential if its omission would not have a material effect on the way the invention works.

[17] In reference to the determination by the examiner of an Aactual invention@, we refer again to Amazon (para 42), affirming that the Commissioner can ask or determine what the inventor has *actually* invented, but that any determination of the actual invention is to be based on a purposive construction of the claims. From Office practice, the actual invention is understood as providing the operable solution to the practical problem. The elements or combination of elements in a claim that are required to provide the operable solution to the practical problem are the essential elements of the actual invention.

[18] Having considered the arguments from the applicant, we apply the above principles of purposive construction to the facts in this case. We therefore review the specification as a whole to understand the background to the invention, the skilled person and their common general knowledge (CGK) at the time, and finally the problem and solution the application addresses.

Skilled person and the CGK

[19] The skilled person was not specifically addressed in the prosecution. However, in view of statements on page 1 of the description, and page 2 of the examiner=s SA, the panel considers this person to have background in financial trading processes

and practices, and in computerized financial data processing systems.

[20] This person=s CGK would include the use of computers and networks in a financial implementation, including workstations connected to central servers over a network or communication link. The CGK also includes knowledge of the conventional open outcry auction methods as described on pages 1-5 of the Description, in the Background to the invention. This would include knowledge of trading terms and processes (bids, offers, hits, lifts, typical market conditions, etc.) relevant to fixed income trading. Finally, the use of computers in data entry of open outcry auction transactions is CGK (description, page 4).

[21] The SA further posits that computers were known to effect sophisticated trading systems that automate transactions at select criteria. In support, the SA cites 5 prior art documents as References of Interest (D1 through D5); the SA states these references collectively show that computerized, networked systems for supporting or managing financial trading (including auctions) was CGK. The examiner thus concludes that the hardware disclosed by the application is conventional.

[22] The applicant submits that the references only confirm that computer supported trading system were known, and that they do not render the claimed hardware platform with complex controlling logic Aconventional@. Further, the applicant questions whether or not the SA has introduced arguments on novelty or obviousness into a question of statutory subject matter.

[23] On this last point, the panel does not share the applicant=s concern. PN 2013-02 is clear that the consideration of the CGK is done solely so as to inform the understanding of the problem and solution taught by an application, and not to remove elements from a claim which are considered known or obvious. A determination of statutory subject matter is separate from

considerations of obviousness or novelty. In our view, the examiner=s analysis has respected this distinction.

[24] The panel agrees with the characterization of the hardware as Aconventional@. We note that the application discloses (page 12) that the invention contemplates using common microprocessor based systems such as a APentium® processor based PC@ running the OS/2® operating system. There is no further description of any specific hardware in the application (other than reference to a specialized keyboard, the subject of a co-pending application). Whether or not specific programming logic is running on specific computer hardware does not automatically render the hardware non-conventional.

[25] Turning to the references cited, we find they are relevant to establishing that it was CGK to employ computer components in a variety of advanced computerized trading and auction systems for financial securities. We agree that at the present publication date, it was CGK that the traditional rules of the open outcry auction were well known, that computers and networks were extensively used in computerized financial trading systems, including open outcry systems, and further, that the processes and rules for conducting open outcry auctions by computerized methods were well established.

Practical problem

[26] Pages 3 to 5 of the description outline several issues with the open outcry methods for fixed income trading. As the size and diversity of these fixed income markets has grown, the speed and volume of trades has increased. Further, early open outcry auctions were carried out by a verbal Aoutcry@ of physically present traders, which allowed louder personalities to unduly dominate and influence the market. Also, as the volume and speed of trades grew, and computerized systems were introduced, human errors during data entry of trades could occur, leading to

potentially significant financial consequences. As we found above, several CGK approaches have used computers to automate many of the auction processes: the skilled person would reasonably expect such automated approaches to reduce human errors in the trading process.

[27] However, the application (page 5) identifies a further problem facing traders in an automated auction environment, which is addressed in the present claims. It was noted that participants in an auction may change their mind or their intentions regarding a trade that has recently changed position (such as volume offered or bid). This creates the situation where an active participant, having already made a bid or offer, may wish to modify their position or previous commitment to buy/sell a particular transaction in view of a recent change being made by the other participant. The description states (page 5) that A*shifting position or backing out of previously committed transactions on very short notice is often very difficult in a traditional open outcry auction process*.@

[28] On page 24 of the description, the problem is further clarified: *AAs can be appreciated, various customer moves in the market are often fast paced - and on occasion position changes may occur simultaneously...this situation can be very disturbing in a rapidly changing market*@. An example is where a first participant hits (accepts) a bid of a certain size from a second participant, an instant *after* the second participant has increased the bid size significantly. This would be disturbing in the sense that significant financial hardship or impact may occur due to now purchasing (or selling) much more than had been intended.

[29] The applicant submits that these conditions create a real world, practical problem in using an automated open outcry auction method and system. We agree in part: a fast paced open outcry auction can involve simultaneous position changes, causing

problems for traders if a change in position happens after they have already committed to a transaction.

[30] However, we do not see this problem as necessarily arising from any specific aspect of the computerization of the auction process. Rather, it appears to be an inherent problem of the auction protocols and rules themselves, wherein as the pace and size of an auction increases, the chance for unintended bids on changed positions can occur (description page 5 and 24). We consider that even with non-automated verbal auctions in a large venue, the problem of having an unintended bid being made after a volume or position has changed can readily occur, despite the lack of a computerized environment. Further, the description does not appear to relate the problem to any specific computer trading system shortcoming, but rather addresses a shortcoming in the auction processes itself.

[31] We recognize, from our reading of the description, that the problem is identified in the context of automated auction systems that were known on the publication date. We understand that the use of automated computer systems at the time may exacerbate the problem identified, but the practical problem, from the specification as filed, appears to remain within the auction process, and not the computer system, *per se.*

[32] Therefore, the practical problem is that in a fast paced, open outcry auction process, involving simultaneous position changes, once a transaction is agreed to, a participant may not easily back out or modify that transaction after their initial acceptance, despite the transaction having recently changed. This may result in the participant taking much more trade volume than planned.

Solution proposed by application

[33] We focus on a reading of the description to understand, in light of the CGK of the skilled person, what the solution to the

practical problem entails. On page 24 and with regard to Figure 9, a second look state is described as the solution to overcome the problem. If during processing, a position change occurs such as an increase in the volume bid just prior to the first participant accepting the bid, the system discriminates the very recent offer/bid from earlier entries via an Aage timer@. This timer is logic which tracks the pendency of bids/offers and creates a second look state whenever the difference between the first bid/offer and the position change is under, for example, two seconds. (variations on this timing are contemplated, such as when a transaction has aged or not aged, or has recently changed or not, or occurred in a pre-determined time period, etc.).

[34] A significant focus of the description is on the details of the logic to enact various rules and procedures of the auction process, and in particular for the present application, the logic and rules behind the second look feature. The description does not disclose any challenging technical problems relating to the computer implementation of the auction processes, nor in automating a second look feature.

[35] The SA on page 2 states that the solution proposed to this problem is a set of trading rules, employed and enforced by an automated system. The set of rules comprises five states, each state with its own protocol for trading behaviour and moving to other states. One of these states is the second-look state.

[36] The examiner found that while the solution is enforced or operable on a computerized system (including servers and networked terminals), these components only form the working environment for the most likely or common embodiment of the auction process. The examiner concludes the solution is therefore the proposed trading rule or protocol.

[37] The applicant submits (written submission, pgs. 9-10) that the solution comprises a Acustomized hardware arrangement@ with

Aprogramming logic@ to configure the hardware to provide one or more aspects of the second look state.

[38] The difference in these two statements on the solution to the problem is that the applicant proposes that the solution involves specifically configured hardware. While the invention is disclosed in relation to Acontrolling logic@, we find this logic relates to the various rules or protocols for the trading or auction steps, and does not relate to controlling any customized hardware. Logic is specifically described for a second look state which determines whether a bid/offer is recently changed just prior to a participant completing a transaction. This allows for the participant to modify the transaction (e.g., Aback-out@). This overcomes the problem of fast paced trades wherein position changes can occur simultaneously.

[39] We do not agree that any specific hardware forms part of the solution. Based on our analysis, we agree with the examiner: the solution is the protocols or rules for an auction or trading process, including a second-look state.

Claimed embodiments

[40] There are 58 claims on file. We refer to claim 1 (para 10, above) to consider a purposive construction: claim 1 represents one embodiment of the second look concept. The first observation is the explicit reference to a computer implemented method, involving what appears to be computer Astates@. All independent claims generally define an open outcry auction process in terms of various Astates@ in a computer implemented method. Claims 8, 14, 20, 25, 29, 34, 38 48, 49, 50, 51, and 52 all explicitly define a method Aimplemented by a programmed computer.@ Claims 43, 46, 53, 54, 55, and 58 all define computer related systems as including workstations, networks and servers. As discussed above, the description does not accord any unique features or qualities to these elements other than their conventional

meanings. While the applicant contends this hardware is specifically configured, we have found that the hardware is conventional computer components used to support programmed logic representing the auction rules.

[41] Claim 1 (as with all independent claims) defines various Astates@, such as the Abid/offer state@ and the Asecond look state@. The description (page 8 and 14) lists five states which determine what options are available to the auction participants; as each state is entered, the auction protocols are shifted, and new rules to trading apply. The aim is to control the flow of the auction in an efficient manner. Although the states are also described in terms of controlling logic for computer workstations, the states can be seen as defining the various stages of the auction process, with certain protocols for each stage.

[42] Accordingly, representative claim 1 defines the solution we identified, when implemented on a computer: an auction process which provides a second look state that discriminates when a bid/offer has recently changed prior to a participant making a trade command.

[43] The remaining independent claims define alternative embodiments of the invention, in terms of computer implemented methods and computer systems. The claims incorporate various combinations of computer workstations and remote terminals connected to central servers using computer networks.

[44] Prior to concluding the construction of the claims, one issue raised by the examiner was the use of varying definitions of the states in the independent claims. The examiner, in addressing an issue of compliance with section 84 of the *Patent Rules*, determined that some of the claims on file did not define the second look state as understood by a reading of page 24 of the description. This contrasts with the applicant, which in all

submissions, appeared to focus on the second look solution for all claims.

[45] In performing a purposive construction, the panel reviewed the description for support of the claimed matter, and to understand the specific auction process being claimed. We find that each independent claim defines a variation of the second look state, supported by a broad reading of the matter disclosed on page 24 of the description. Each claim defines a condition wherein a trade has aged or not, recently changed or not, changed within a certain time period, or a trade occurred where it was not intended. The description (page 24) refers to position changes occurring almost simultaneously, which is understood as meaning almost simultaneously with a recent or previously agreed trade by an aggressor. Finally as to the various manners of modifying the transaction as a result of the second look (buy/sell all volume, some volume, etc), we conclude that each independent claim defines these variations in light of the broad reading of the second look state disclosed on page 24.

[46] While we have read and construed all claims, we need not list the results for every independent claim here. The relevant issues on construction have been addressed in view of the discussion on claim 1. Likewise, the dependent claims add straightforward limitations concerning additional volume being traded, certain trade actions (trade some/all, refuse some/all), the definition of Aunaged, whether some/all of the second volume is traded, etc.. The prosecution history reveals no disagreement between the applicant or examiner as to the meaning or understanding of these claims.

Essential elements

[47] We have found, on a fair reading of the specification as a whole, in light of the CGK, that the solution disclosed by the application and claimed in each independent claim is an auction method comprising various protocols or states including a second look state.

[48] We note that it is clear from the discussion of CGK above, that the use of computers, workstations, servers and networks to implement an auction process were CGK at the claim date. One skilled in the art would consider that these features define the conventional operating environment of a system or method for automated financial trading systems. While the computers, workstations, servers or networks provide a supporting technical means to communicate and disseminate trading data, they do not materially affect the nature of the overall auction process including various rules and protocols such as defined by the second look state in each independent claim. As we did not find any specific hardware or computer structure to be part of the solution to the practical problem (see para 41), we would not expect any specific hardware or structure to now be an essential element.

[49] The applicant submits that the claimed subject matter has no meaning outside the context or structure of machines (i.e. the computer components); one could not perform the transition between computer states defined in the claims, nor could one perform the steps outside a computer, for example, mentally in one=s head. The conclusion is that the claims integrally relate to computerized machines or methods.

[50] We note that the solution of an auction process comprising a second look state need not be confined to only a computer implementation. We discussed (para 33) the fact that the practical problem is just as likely to be encountered in a non-computerized, verbal outcry environment. The auction rules to affect a second look state in the solution would therefore also be applicable to a non-computerized auction process. For example, as bids/offers are made, if a second participant shouts a position change within two seconds, it

would be a sensible approach for the broker/auctioneer to allow the first participant to modify his bid while the other participants are asked to refrain from bidding for a period of time until the first participant has time to address the changed position.

[51] Such a process would be a mental/verbal auction: in this manner, the computer components may be omitted. Although the process is likely slower and less convenient, the lack of a computerized process does not materially affect the solution to the practical problem, i.e. the auction rules for a second look state. As we already discussed, Astates@ are considered various stages in the auction, with specific protocols for participants. The Atransition@ between states can occur without a computer.

[52] In view of the above, the panel considers that the computer components are part of the context in which the solution operates, and by which the auction processes for a second look state is put into operation in the claimed embodiments. These features are not part of the solution to the practical problem, and thus are not essential elements of the actual invention.

[53] The essential elements of the independent claims are those elements that achieve the second look solution. In claim 1, the essential elements of the claims involve steps (a) through (e), namely, the auction process including the added steps to enforce a second look rule. However, the limitation of being Aimplemented by a programmed computer@ is not essential to the invention of claim 1.

[54] The panel therefore finds that none of the computer components or computer implementations of the invention are essential to the actual invention. Paraphrasing the Court in *Amazon* (see para. 44), we find that this is a case where, upon a purposive construction, the invention is not A*what appears on its face to be a claim@* to a computer-implemented method or computer system.

Do the purposively construed claims define Statutory Subject Matter?

Legal Principles and Guidelines

[55] Section 2 of the *Patent Act* sets out the categories of statutory subject matter:

> "invention" means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

[56] In *Amazon*, the Federal Court of Appeal provided guidance on s.2, referring to the decision in *Schlumberger Canada Ltd. v. Canada (Commissioner of Patents)*, [1982] 1 F.C. 845 (C.A.) [*Schlumberger*]. One may reasonably conclude that *Schlumberger* is a case in which what on its face was a claim to a computerized method was nevertheless identified as being a claim to only an abstract principle and mental process. As discussed in *Amazon* [paras. 62 to 69], because a patent cannot grant for an abstract idea, it is implicit in the definition of invention that the subject matter of the claim must be something with physical existence or something that manifests a discernible effect or change: the physicality requirement cannot be met merely by the fact that the claim is limited to a practical application such as by the presence of a computer.

[57] PN-2013-03 addresses the finding of the court in *Amazon* and other relevant Canadian jurisprudence on the meaning of invention under section 2 of the *Patent Act*, as read in conjunction with subsection 27(8) of the *Patent Act*. The practice notice provides a summary of those inventions which are not included within the meaning of invention in the *Patent Act*:

- $ inventions that fall within a defined exclusion from patentability;
  - $ e.g. fine arts (i.e. things Athat are inventive only in an artistic or aesthetic sense@); methods of medical treatment, etc.

- $ disembodied inventions (including those lacking a method of practical application);
  - $ e.g. inventions that lack physicality (i.e. are not Asomething with physical existence, or something that manifests a discernible effect or change@);
  - $ e.g. inventions where the claimed subject-matter is a mere idea, scheme, plan or set of rules.

[63] While this summary is not intended by the panel to indicate some form of standalone test, we consider it a succinct indication of the types of inventions which do not define statutory subject matter. In our letter of 28 June 2013, we directed the applicant=s attention to this practice notice, and consider the applicant was aware of the types of inventions not considered to fall in the meaning of invention as summarized above. The applicant did not specifically comment on this summary, but in addressing the points raised in the SA, the applicant did provide reasoning as to why the claimed matter was not excluded nor disembodied/abstract. We therefore proceed to consider whether or not the construed claims fall within these criteria of inventions as summarized above, and we address the additional arguments raised by the applicant.

Analysis

[64] Considering the independent claims first, we have found that the essential elements of the invention involve protocols or rules for an auction process including a second look state, wherein a trader can adjust or modify the transaction after having already committed. On a purposive construction of the

various claim embodiments, there are no essential computer or computerized elements.

[65] Absent the non-essential computer components, the independent claims define the protocols or rules to be used in an auction process. We have not identified any further essential elements. We therefore find that the purposively construed claims are disembodied, in the sense that they are a scheme or rules for trading. The claims are not saved by the fact they contemplate the use of a computer to give the set of rules a practical application.

[66] In their submissions, the applicant argues that the subject matter of the independent claims pervasively and integrally relates to machines and their uses, i.e. Acustomized hardware@, computer systems or computer-implemented methods, and therefore each of the claims presented recites either a machine or an art/process, both of which are patentable under section 2 of the Patent Act.

[67] Based on our purposive construction, the panel does not agree. We have already found that the computer hardware components are not essential to achieving the solution to the practical problem. The pervasive recitation of computer components or computer implemented steps does not render such elements essential. We have found, in concurrence with the finding of the examiner, that the invention pertains to an auction/trading process incorporating a second look rule or protocol. Paraphrasing the words in *Schlumberger* (cited in *Amazon*, above), the use of a computer, either incidentally or pervasively, cannot have the effect of transforming into patentable subject matter what would otherwise be clearly not patentable.

[68] The applicant also argues that the claimed subject matter, apart from the presence of computer components, still manifests a discernible effect or change. This occurs, for example, since the process modifies electromagnetic patterns by the storage of data, or, for example, since the process results in trading items which may be physical.

[69] However, the purposive construction of the claims has found that the physical elements of the computer (computer implemented steps, workstations, data processing, server, network, etc) are not essential to the invention. The construed claims merely define rules and protocols for an auction process. Any stored data or signal patterns are considered outside of the solution to the practical problem and not essential. Even if the process was conducted manually, a recording of bids, offers or second look trades on paper, for example, would not affect our conclusion, as the presence of an otherwise statutory element (e.g. paper) does not instill physicality to the non-statutory auction process.

[70] As for whether or not the outcome of the auction (i.e. Atrading items@) provides an aspect of physicality to the claims, we consider the outcome of the claimed matter to be a financial transaction. Any output of the auction process, such as a financial transaction (purchase or sale), or any gains or losses in wealth related to such transactions, by themselves have only intellectual meaning. Thus the result of the proposed solution, even considering the applicant=s suggestion, remains abstract. We do not find, as the applicant contends, that the outcome of the invention causes a physical change or effect; there is no physical transfer of goods defined in the claims, and any potential physical effect or discernible change arising from the outputs of the auction protocol is beyond the scope of the present application.

Dependent claims

[71] Having earlier concluded from the construction that the computer implemented components or other physical system components were not essential to the added matter of the dependent claims, the panel concludes there is nothing in these claims that would rectify the abstract condition of the independent claims.

Conclusion

[72] Therefore, as found by this panel, claims 1-58 define a mere scheme or plan or abstract set of rules which are considered disembodied, and therefore they do not define an invention under Section 2 of the *Patent Act*.

Recommendation

[73] In view of the above findings, the Board recommends that the application be refused on the grounds that claims 1 to 58 do not define statutory subject matter and are therefore non-compliant with section 2 of the *Patent Act.*

Andrew Strong	Stephen MacNeil	Paul Sabharwal
Member	Member	Member

Decision

[74] I concur with the Patent Appeal Board=s findings and its recommendation that the application be refused as claims 1 to 58 do not comply with section 2 of the *Patent Act.*

[75] Accordingly, I refuse to grant a patent on this application. Under Section 41 of the *Patent Act*, the applicant has six months within which to appeal my decision to the Federal Court of Canada.

Sylvain Laporte
Commissioner of Patents

Dated at Gatineau, Quebec,
this 29th day of November 2013