

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER B. MADOFF, ALBERTO C. CASANOVA
and CHRISTOPHER KEITH

Appeal No. 2006-1179
Application No. 10/242,532

HEARD: JUNE 8, 2006

Before OWENS, CRAWFORD, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 41-57 and 59-72, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a method of auctioning products over a distributed networked computer system (specification, page 1). The method can include entering pre-defined relative indications that correspond to a willingness to buy or sell the product and wherein the pre-defined relative indications specify a price relative to a current market price (specification, page 2). The auction process is active when an order is presented to the system (specification, page 3).

Claim 41 is representative of the invention, and is reproduced as follows:

41. A method of auctioning a product, said method executed over a distributed networked computer system, said method comprising:

receiving, by the distributed networked computer system from an auction participant, a pre-defined relative indication that corresponds to a willingness to buy or sell the product, the pre-defined relative indication specifying a single trading interest with a price relative to a current market price and a quantity, with the pre-defined relative indication remaining dormant and undisclosed to other auction participants as to the existence of the pre-defined relative indication until executed against an order, and when executed, disclosing details of a transaction involving the pre-defined relative indication to the parties to the transaction, and wherein only receipt of an order initiates an auction;

receiving an order for the product, the order specifying a price and quantity, and upon receiving the order starting an auction in the distributed networked computer system for the product by:

determining whether the received pre-defined relative indication has a relative price that satisfies the price of the received order; and if the price of the pre-defined relative indication satisfies the price of the received order,

executing the received order against the pre-defined relative indication to satisfy the order and end the auction if the quantity in the pre-defined relative indication is sufficient to satisfy the quantity specified in the order.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Lupien et al. (Lupien) 5,689,652 Nov. 18, 1997

Claims 41-57 and 62 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 41-44, 46, 49, 50, 52, 53, 55-57, 59 and 63-69 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Lupien.

Claims 45, 47, 48, 51, 54 and 70-72 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupien.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (mailed November 8, 2005) for the examiner's complete reasoning in support of the

rejections, and to the brief (filed August 17, 2005) and reply brief (filed January 9, 2006) for the appellants' arguments thereagainst.

Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii) (eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of indefiniteness, anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we make the determinations which follow. We begin with the rejection of claims 41-57 and 62 under 35 U.S.C. § 112, second paragraph as being indefinite.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. Id.

The examiner's focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. § 112, second paragraph, is whether the claims meet the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. Some latitude in the manner of expression and the aptness of terms is permitted even though the claim language is not as precise as the examiner might desire. If the scope of the invention sought to be patented cannot be determined from the language of the claims with a reasonable degree of certainty, a rejection of the claims under 35 U.S.C. § 112, second paragraph, is appropriate.

Thus, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite. As stated

above, if the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite. See Ex parte Porter, 25 USPQ2d 1144, 1146 (Bd. Pat. App. & Int. 1992).

Furthermore, appellants may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the Court in In re Swinehart, 439 F.2d 210, 213-14, 169 USPQ 226, 228-29 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought.

With this as background, we analyze the specific rejections under 35 U.S.C. § 112, second paragraph, made by the examiner of claims 41-57 and 62. The examiner's position (answer, page 5) is to the effect that the language "if the price of the predefined relative indication satisfies the price of the received order" is indefinite because the claim language is conditional and because the claim language does not set forth how the system will perform if the price does not satisfy the price of the received order. The examiner adds (answer, page 10) that "while broad language is appropriate, 'if' statements without an associated 'if not' is

not as such a claim does not provide sufficient metes and bounds that would allow one of ordinary skill to determine whether or not a patented invention is being infringed upon."

Appellants assert (reply brief, page 2) that

These elements are not optional. In the logic of a method carried out according to claim 41, such a method tests (provided by the use of an "if" statement) to see if the conditions are met before terminating the auction. The fact that the condition may not be met from time to time does not mean that the condition recited in the claim is optional or optional language, because the method, as recited in the claim, still requires testing for the condition.

From our review of independent claims 41 and 53, we find that determining step requires a determination of whether the relative price of the pre-defined relative indication (PDI) satisfies the price of the received order. If the price is met, the executing step is carried out (if the quantity also meets the order). If it is determined that the price does not meet the price set in the order, then the executing step is not carried out. As a result of this claim construction, we find that an artisan would have readily understood the metes and bounds of the claim. Independent claim 53 contains similar language.

The examiner additionally asserts (answer, page 5) that the term "immediately," found in claims 43, 44, 46, 48, 51, 52, and 62, is indefinite because the term is not defined in the claim,

the specification does not provide a standard for "ascertaining the requisite degree" and because an artisan would not be reasonably apprised of the scope of the invention. Appellants assert (reply brief, page 3) that "immediately executing" means just that, in contrast to an embodiment where the auction waits for a better priced response or PDI to come along. We agree. From our review of the specification, we find (pages 6 and 10) that when a response or PDI meets the terms of the order, the order is immediately executed and the auction is ended. We find that "immediately executed" means that the order is executed without waiting for some other event, such as a buy order with a better price, to occur. Thus, we find that the term immediately, as recited in the claims, would have been readily understood by an artisan.

The examiner additionally asserts (answer, pages 5 and 6) that the term "sufficient," as it appears in claims 41 and 53 is a relative term which renders the claim indefinite. From our review of the record, we agree with appellants (reply brief, page 4) that an artisan would understand that "sufficiently" refers to whether the quantity specified by the order is met or exceeded by the quantity specified in the PDI. Thus, we find that an artisan would have readily ascertained the meaning of the term

"sufficiently" in independent claims 41 and 53. From all of the above, we find that an artisan would be able to readily ascertain the metes and bounds of the claims. The rejection of claims 41-57 and 62 under 35 U.S.C. § 112, second paragraph is reversed.

We turn next to the rejection of claims 41-44, 46, 49, 50, 52, 53, 55-57, 59, and 63-69 under 35 U.S.C. § 102 (b) as being clearly anticipated by Lupien.

Appellants assert (brief, page 13) that Lupien's satisfaction density profile (SDP) does not meet the limitation of claim 41 that the PDI is executed against an order, or that the auction is initiated only upon receipt of an order. It is argued (brief, page 14) that claim 41 recites starting an auction upon receiving the order. Appellants further argue (brief, page 15) that Lupien does not teach "immediately executing the received order against the pre-defined relative indication to satisfy the order and end the auction." It is additionally argued (id.) that Lupien teaches crossing SDPs which represent orders, whereas claim 41 recites an auction. It is further asserted (brief, page 16) that "none of the Lupien's complex processing however suggests 'determining whether the received predefined relative indication has a relative price that

satisfies the price of the received order.'" The examiner's position is found on pages 6-8 of the answer.

In the reply brief, appellants argue (pages 5 and 6) to the effect that in Lupien, receiving an order does not start a crossing of satisfaction density profiles, but rather that the calculation of figure 8, step 112 starts a crossing. It is argued (reply brief, page 6) that Lupien does not describe auctions, does not start an auction or for that matter a crossing upon receiving an order. It is further argued (id.) that

Appellant's [sic, appellants'] claim 41 recites properties of "pre-defined relative indications" and "orders" that are distinct from each other. Appellant [sic, appellants] claims two distinct elements, whereas Lupien teaches two closely related elements orders and satisfaction density profiles that represent the orders. In contrast, Lupien does not have any analogue for "pre-defined relative indications, since neither the orders nor the satisfaction density profiles possess all of the claimed features of the pre-defined relative indications.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what

subject matter is encompassed by the claim and what subject matter is described by the reference.

From our review of Lupien, we find that the reference is directed to a matching system, and in particular, a continuous crossing network that matches buy and sell orders upon a satisfaction and size profile (col. 1, lines 7-9). Lupien discloses that in an alternative embodiment, the invention can be operated by treating each new satisfaction density profile (SDP) that is entered as a triggering event that causes a new round of computations (col. 4, lines 44-47). We find from this disclosure that each new order (sell order) input as an SDP will trigger a new round of computation, which will match the seller with a buyer. Accordingly, we agree with appellants' contention that receiving an order does not start a crossing of SDPs.

Lupien further discloses (figure 4) that an order can have a time in force 28, such as until cancelled, minutes, etc. Thus, from these teachings of Lupien that a sell order can be for a predetermined amount of time, we find that the entering of a sell order will trigger an auction of the item presented for sale.

Lupien further discloses that traders input as orders a satisfaction density profile (SDP) and maximum size limit which characterizes the trader's degree of satisfaction to trade at any and all prices and sizes up to the size limit (col. 3, lines 44-53). Lupien further discloses that the SDP is a two dimensional grid with one dimension being price and the other dimension being the size of the transaction (col. 3, lines 54-58). Each trader can input one or more profiles (col. 4, lines 1 and 2). From the disclosure that a trader can input one or more SDPs, we find that an SDP can represent a single trading interest. It is further disclosed that once the SDP is complete, it is transmitted to the controller which anonymously matches buy and sell orders (col. 4, lines 6-9).

Assume a batch process where multiple traders enter SDPs that represent buy or sell orders for a particular stock. Upon transmission of the SDPs to the central matching controller (CMC), the CMC will cause buy profiles to be stored in a buy profile database and will cause sell profiles to be stored in a sell database. The CMC will then calculate, for each buy/sell pair, a mutual satisfaction cross product. The values of the cross products are ranked in order, and the matching continues down the ranked list (col. 4, lines 10-26).

From the disclosure that the orders are placed in buy/sell databases, we find that a sell order, which includes the price and quantity of the product to be sold, meets the claimed receiving an order for a product. Although claim 41 recites properties of the PDIs and the orders which are distinct from each other, we find that the orders entered by traders as SDPs can be both orders and SDPs as advanced by the examiner. From the disclosure of having sell orders in the system waiting for a buy order to trigger a crossing, and the disclosure that “[i]f all feasible crosses have been completed, then the process is temporarily suspended until the next order is entered” (col. 9, lines 41-43) we find that buy orders can be in the buy database waiting for a sell order to be entered, which will restart the computational crossing. In addition, from the disclosure of the price being either an absolute price or a relative price, e.g., pegged to the bid/ask midpoint or to the average price of the last match of that security (or stock) (col. 7, lines 6-9) we find that the buy order of Lupien meets the claimed PDI. Thus, we find that the SDPs, which represent orders, can represent both orders and PDIs. In addition, we find that a SDP for a sell order represents an order as set forth in

claim 41, and that an SDP entered for a buy order that sits in the system for an order to be entered, and is pegged to the bid/ask midpoint, meets the claimed PDI. However, claim 41 additionally requires that "only receipt of an order initiates an auction." Upon considering the SDPs representing buy and sell orders to meet both the claimed order and PDI, we find that both the orders and the SDPs can initiate an auction; see the alternative embodiment of col. 4, lines 44-47). Thus, considering the orders represented by SDPs to be both an order and a PDI, the limitations of claim 41 are not met. In addition, even if we considered the buy order to be the claimed order and considered the sell order SDP to be the claimed PDI the language of independent claim 41 would still not be met because the PDI would also be capable of initiating an auction. Accordingly, we find that however Lupien is interpreted, that the limitations of claim are not anticipated by Lupien.

From all of the above, we find that the examiner has failed to establish a prima facie case of anticipation of claim 41. Independent claims 53, 57 and 65 also recite that only receipt of an order initiates an auction. The rejection of claims 41-44, 46, 49, 50, 52, 53 , 55-57, 59, and 63-69 under 35 U.S.C. § 102(b) is reversed.

We turn next to the rejection of claims 45, 47, 48, 51, 54, and 70-72 under 35 U.S.C. § 103(a) as being unpatentable over Lupien. We note at the outset that independent claim 70 also recites that only receipt of an order initiates an auction. We cannot sustain as we find no evidence to support the obviousness of modifying Lupien to provide for initiation of an auction to be initiated only upon the receipt of an order. Accordingly, the rejection of claims 45, 47, 48, 51, 54, and 70-72 is reversed.

CONCLUSION

to summarize, the decision of the examiner to reject claims 47-57 and 62 under 35 U.S.C. § 112, second paragraph is reversed. The decision of the examiner to reject claims 41-44, 46, 49, 50, 52, 53, 55-57, 59, and 63-69 under 35 U.S.C. § 102(b) is reversed. The decision of the examiner to reject claims 45, 47, 48, 51, 54, and 70-72 under 35 U.S.C. § 103(a) is reversed.

REVERSED

TERRY J. OWENS)	
Administrative Patent Judge)	
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