

**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

<b>CHICAGO BOARD OPTIONS</b>	)	
<b>EXCHANGE, INC.,</b>	)	
	)	
<b>Plaintiff,</b>	)	
	)	<b>No. 07 CV 0623</b>
<b>v.</b>	)	
	)	<b>Judge Joan H. Lefkow</b>
<b>INTERNATIONAL SECURITIES</b>	)	
<b>EXCHANGE, LLC,</b>	)	
	)	
<b>Defendant.</b>	)	
	)	

**OPINION AND ORDER**

Chicago Board Options Exchange, Inc. (“CBOE”) filed suit against International Securities Exchange (“ISE”) on January 31, 2007, seeking, among other relief, a declaratory judgment that U.S. Patent No. 6,618,707 (“the ’707 patent”) is invalid and is not infringed by CBOE. ISE is the holder of the ’707 patent, entitled “Automated Exchange for Trading Derivative Securities,” which was issued on September 9, 2003. Prior to CBOE’s filing of its complaint, ISE had sued CBOE in the Southern District of New York alleging infringement of the ’707 patent. The earlier action, now designated No. 07 CV 4709 (N.D. Ill.), was transferred to the Northern District of Illinois and assigned to this court. The court issued its *Markman* rulings on the disputed claims of the ’707 patent on January 25, 2010.<sup>1</sup> Before the court is CBOE’s motion for summary judgment of noninfringement. For the reasons stated below, the motion [#309] is granted.

---

<sup>1</sup> The court modified its construction of the term “automated exchange” in an order dated March 10, 2010. *See* Dkt. No. 300.

## LEGAL STANDARD

Summary judgment obviates the need for a trial where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). To determine whether any genuine issue of fact exists, the court must pierce the pleadings and assess the proof as presented in depositions, answers to interrogatories, admissions, and affidavits that are part of the record. Fed. R. Civ. P. 56(c) Advisory Committee's notes. The party seeking summary judgment bears the initial burden of proving there is no genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 91 L. Ed. 2d 265, 106 S. Ct. 2548 (1986). In response, the nonmoving party cannot rest on bare pleadings alone but must use the evidentiary tools listed above to designate specific material facts showing that there is a genuine issue for trial. *Id.* at 324; *Insolia v. Philip Morris Inc.*, 216 F.3d 596, 598 (7th Cir. 2000). A material fact must be outcome determinative under the governing law. *Insolia*, 216 F.3d at 598–99. Although a bare contention that an issue of fact exists is insufficient to create a factual dispute, *Bellaver v. Quanex Corp.*, 200 F.3d 485, 492 (7th Cir. 2000), the court must construe all facts in a light most favorable to the nonmoving party as well as view all reasonable inferences in that party's favor. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986).

In a patent infringement action, an accused infringer seeking summary judgment of noninfringement may meet its initial burden by providing evidence that would preclude a finding of infringement or by showing that the evidence fails to establish a material issue of fact essential to the patentee's case. *Vivid Techs. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 807 (Fed. Cir. 1999). A court may grant summary judgment of noninfringement if, after viewing the

alleged facts in the light most favorable to the patentee and drawing all reasonable inferences in the patentee's favor, there is no genuine issue as to whether the patent claims encompass the accused device. *Novartis Corp. v. Ben Venue Labs.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001).

## **BACKGROUND**

CBOE, the first United States options exchange, was founded in 1973. From its beginnings, it has used a floor-based, open outcry model, where trading occurs through oral communications between market professionals on the floor of the exchange. CBOE has taken steps, however, to incorporate technological advances into its model. To that end, it began developing a fully screen-based trading system in the mid-1990s. In October 2001, CBOE introduced CBOEdirect as the platform for its Screen-Based Trading System ("SBT"), a fully computerized system used only for early morning trading. In 2002, CBOE began developing the Hybrid Trading System ("Hybrid"). Hybrid was officially introduced in 2003. Like SBT, Hybrid uses a version of CBOEdirect as its trading platform,<sup>2</sup> but it differs in that it combines automated and open outcry trading.

CBOE has described Hybrid as an integrated single market system that "blends the elements of open outcry and electronic execution." Ex. 10 to Doyle Decl. 63:9-10; Ex. 10 to DeVincenzo Decl. at CBOE000257520. It has been presented as "a marriage of two trading environments." Ex. 22 to Doyle Decl. 69:4-5. Somewhat at odds with these representations, however, CBOE has also touted Hybrid as "provid[ing] customers with a choice between a pure electronic system . . . and open outcry," Ex. 2 to DeVincenzo Decl. at CBOE000295468,

---

<sup>2</sup> Changes were made to CBOEdirect's allocation algorithm and order routing system, among other things.

essentially giving them “the best of both worlds.” Ex. 11 to DeVincenzo Decl. at CBOE000296000.

In Hybrid, orders may be placed either electronically or through open outcry. They are entered into CBOEdirect’s electronic book (“the eBook”) and then routed pursuant to an established order routing system. Orders eligible for automatic (electronic) execution are compared with orders and quotations stored on the eBook. They will only be executed electronically if the eBook is at the national best bid or offer (“NBBO”); if not, they are routed to open outcry. *See* CBOE Rule 6.13(b)(iv), attached as Ex. 20 to Doyle Decl.; Ex. 13 to DeVincenzo Decl. at CBOE001787984. Those at NBBO are executed electronically according to the Ultimate Matching Algorithm (“UMA”). UMA parameters require that orders be executed first against public customer orders in the eBook, after which any remainder is shared among professional orders and quotations on a pro rata basis. If there is still a remainder, what happens next depends on whether the order is a limit order<sup>3</sup> or a market order.<sup>4</sup> If it is a limit order, the remainder is stored in the eBook. *See* Ex. B to Smith Decl. If it is a market order, the remainder is sent to open outcry for further execution. *See id.* During this process, split price execution may occur, as “[t]he balance of the electronic order [is] eligible to be filled . . . either electronically . . . or manually.” CBOE Rule 6.45A(a)(i), attached as Ex. 16 to Doyle Decl. For orders entered through open outcry, public customer orders in the eBook are given first priority, with the balance executed through open outcry. The rules used by CBOEdirect for allocating to

---

<sup>3</sup> A limit order is “[a]n order to buy or sell securities at a specified price (the limit).” CBOE Dictionary, [http://www.cboe.com/learncenter/glossary\\_g-l.aspx](http://www.cboe.com/learncenter/glossary_g-l.aspx) (last visited March 1, 2011).

<sup>4</sup> A market order is “[a]n order to buy or sell securities at the current market.” CBOE Dictionary, [http://www.cboe.com/learncenter/glossary\\_m-r.aspx](http://www.cboe.com/learncenter/glossary_m-r.aspx) (last visited March 1, 2011). “The order will be filled as long as there is a market for the security.” *Id.*

both public customer and professional orders are stored together in mass storage on one or more computers. These rules are loaded into memory for use by CBOEdirect.

CBOE holds two patents related to Hybrid, U.S. Patent No. 7,552,083 (“the ’083 patent”), entitled “Hybrid Trading System for Concurrently Trading Through Both Electronic and Open-Outcry Trading Mechanisms,” and U.S. Patent No. 7,613,650 (“the ’650 patent”), entitled “Hybrid Trading System for Concurrently Trading Securities or Derivatives Through Both Electronic and Open-Outcry Trading Mechanisms.” The ’707 patent is cited as a reference in both CBOE patents. In allowing the ’650 patent, the patent examiner wrote,

[N]othing in the prior art teaches or even suggests the integration of traditional open-outcry methods with automated electronic order execution. The instant invention is patentably distinct over the prior art because of the unique rule-based order routing algorithm which integrates the features of open-outcry trade execution with electronic order trade execution.

Ex. 25 to Doyle Decl.

## ANALYSIS

A patent infringement analysis involves a two-step process in which the court first construes the scope and claims of the patent claims asserted. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1581–82 (Fed. Cir. 1996) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d* 517 U.S. 370, 134 L. Ed. 2d 577, 116 S. Ct. 1384 (1996)). Rather than repeat all its rulings on claim construction here, the court refers the parties to its *Markman* order, Dkt. Nos. 286, 300, and will reference its constructions only as necessary. Second, the fact finder compares the properly construed claims to the accused product. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). Unless every limitation of a patent claim is found in the accused product, either literally or under the doctrine

of equivalents, there can be no infringement. *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1362 (Fed. Cir. 1999).

ISE asserts that Hybrid and CBOEdirect are infringing claims 1-5, 6, 9-10, 22-23, 35-36, 43, 45, and 56-58 of the '707 patent. CBOE argues that Hybrid does not infringe because it is not an automated exchange, does not have the required structure for system memory means, and does not match as described in the '707 patent. All of the claims either contain the limitation "automated exchange" or depend from claims containing this limitation. All system claims contain the limitation "system memory means," and all method claims contain the limitation "matching" or depend from claims that do.

#### **I. Automated Exchange**

The '707 patent claims only an automated exchange. The court construed "automated exchange" to mean "a method for executing trades of financial instruments that is fully computerized, such that it does not include matching or allocating through use of open outcry." Dkt. No. 300. The patent disavows floor-based trading. An "exchange" is "a method for executing trades of financial instruments." *Id.* An institution, such as CBOE, may use more than one exchange to execute trades. "Automated" means "fully computerized, such that its protocol does not include matching or allocating through use of open outcry in order to execute trades." *Id.* The court further explained that "a method that effects trades of financial instruments by automatically matching and allocating but also entails 'oral communications between market professionals at a central location in open view of other market professionals" is not automated. *Id.* The court's construction of "automated" in the minute order dated March 10, 2010, Dkt. No. 300, does not fully express its construction, which is hereby amended as follows:

A method that effects trades of financial instruments by automatically matching and allocating but also permits matching and allocating through “oral communications between market professionals at a central location in open view of other market professionals” (’707 patent, col. 1, ll. 24–29) is not fully computerized and therefore not “automated.”

The parties initially disagree as to what constitutes the accused exchange. CBOE maintains that only Hybrid is at issue, while ISE bases its opposition to CBOE’s motion on the fact that Hybrid consists of two exchanges, CBOEdirect and open outcry, and that CBOEdirect infringes the ’707 patent.<sup>5</sup> This difference is material. Hybrid uses both electronic and floor-based trading, with some matching and allocating occurring through open outcry. Hybrid is thus squarely outside the court’s construction of the term “automated exchange,” and so Hybrid does not infringe the ’707 patent. ISE appears to concede this point, instead arguing that Hybrid is not a single exchange but rather a system that uses two separate methods for executing trades of a financial instrument, i.e., it is comprised of two exchanges, one of which infringes the ’707 patent.

ISE has at least raised a genuine material issue as to whether, under the court’s construction, CBOEdirect may be considered an exchange separate from the open outcry aspects of Hybrid. Although part of Hybrid, CBOEdirect was initially designed to function independently. *See* Ex. 5 to DeVincenzo Decl. at CBOE006235 (“Although designed to be a

---

<sup>5</sup> CBOE argues that ISE has only belatedly accused CBOEdirect of infringement. In its initial pleading, however, ISE generally accused CBOE of infringing the ’707 patent, giving Hybrid as an example of such infringement without excluding the possibility that other products or equipment infringe the patent. *See* Ex. A to Second Doyle Decl. ¶ 10 (“CBOE infringed . . . the ’707 patent by making, using, selling, offering to sell, or causing to be sold products or equipment in the United States, such as the CBOE Hybrid System . . .”). On January 27, 2009, prior to the date allowed for serving contention interrogatories, the *Markman* hearing, and the court’s final claim construction, ISE updated its interrogatory response to include CBOEdirect as an accused exchange.

stand-alone system, key components of CBOE*direct* have been used as the foundation of the hybrid.”). Whether CBOE considers Hybrid to be one fully-integrated system or a combination of two is itself unclear.

In some instances, Hybrid has been touted both internally and externally as giving customers “a choice between a pure electronic system, offering sub-second execution, and open outcry.”<sup>6</sup> Ex. 2 to DeVincenzo Decl. at CBOE000295468 (“So long as customers prefer to choose between the two methods, [CBOE] will continue to provide them with both.”); *see also* Ex. 3 to DeVincenzo Decl. at CBOE051225 (CBOE offers customers trading “both through traditional open outcry methods and through [CBOE’s] electronic platform, CBOE*direct*”); Ex. 25 to DeVincenzo Decl. at CBOE001316448 (“CBOE*direct* is a trading system that includes a trading engine with an order book. CBOE*direct* takes in quotes and orders, executes those that match, disseminates market data . . . and places (unexecuted) quotes and orders in the book.”). In reporting on trading volume, trades are reported as executed by either one of two methods, electronic and open outcry. *See, e.g.*, Ex. 6 to DeVincenzo Decl. at CBOE006325 (“Ninety-two percent of the orders traded on CBOE’s Hybrid Trading System are executed electronically, accounting for 55% of the volume in those classes, while the remaining 8% of Hybrid orders and 45% of the volume are handled through the open outcry method of trading.”).

In other instances, CBOE and its officers have portrayed Hybrid as a fully integrated trading method in which open outcry and CBOE*direct* do not exist side by side but instead as one. *See, e.g.*, Ex. 8 to Doyle Decl. 119:2–13 (“The Hybrid system is one exchange.”); Ex. 20 to

---

<sup>6</sup> CBOE’s attempt to limit this statement to the choice customers have in placing their orders is unavailing, as the statement discusses sub-second *execution*, not sub-second *placement*.



Doyle Decl. 161:16–162:2 (“[Hybrid is] an integrated system.”); Ex. 21 to Doyle Decl. 72:19–73:10 (“[Hybrid] is open-outcry and some electronics all coming together in one place, not running side by side . . . .”); Ex. 22 to Doyle Decl. 69:2–70:3 (“[Hybrid] was a marriage of the two systems [floor-based and screen-based].”); Ex. 6 to DeVincenzo Decl. at CBOE CBOE006325 (the fact that about an equal volume of trades occurred electronically and through open outcry “illustrates the effective synergies of floor- and screen-based trading in CBOE’s Hybrid trading world.”); Ex. 10 to DeVincenzo Decl. at CBOE000257520 (“CBOE developed the first *hybrid* trading model, in which aspects of both open-outcry and electronic trading were integrated to function as a single market.”). The patent examiner’s explanation of allowance for the ’650 patent, that “nothing in the prior art teaches or even suggests the integration of traditional open-outcry methods with automated electronic order execution,” Ex. 25 to Doyle Decl., works in CBOE’s favor.<sup>7</sup> Yet because there are disputed material issues as to whether CBOEdirect can be considered an independent exchange, it is a jury question not appropriate for summary judgment.

---

<sup>7</sup> ISE maintains that this addresses the order routing system, which is immaterial to whether CBOEdirect should be considered part of Hybrid. As part of the order routing system, orders initially destined for automatic execution may be routed to open outcry for matching and allocating if, for example, the price is below NBBO.

## II. System Memory Means

CBOE argues that, even if Hybrid (or by implication CBOEdirect) is an automated exchange, summary judgment of noninfringement is appropriate on claims 1-6, 9-10, and 22-23 of the '707 patent because CBOEdirect does not have the structure of the “system memory means.” Claim 1 provides that the exchange includes “system memory means for storing allocating parameters for allocating trades between the incoming order or quotation and the previously received orders and quotations.” '707 Patent, col. 30, ll. 1–4. The parties agreed that system memory means is a means-plus-function limitation, requiring ISE to prove that CBOEdirect performs the function of the system memory means using either the disclosed structure or its equivalent to establish literal infringement. *See Nomos Corp. v. Brainlab USA, Inc.*, 357 F.3d 1364, 1369 (Fed. Cir. 2004). The court construed the function as “[s]toring parameters of the entity administering the invention for allocating trades between the incoming order or quotation and the previously received orders and quotations.” Dkt. No. 286 at 7. The structure is system memory 26, bid matching process 34, and offer matching process 36. *Id.*

The '707 patent states that “the bid matching process 34 and the offer matching process 36 . . . contain rules that give priority to public customer orders at the best price, then allocate any remaining part of an incoming order or quotation among the professional orders and quotations on a pro rata basis.” '707 Patent, col. 14, ll. 53–58. It further provides that “[w]hen the incoming order is for more than the predetermined [primary market maker] small order preference size, the bid matching process 34 and the offer matching process 36 allocate the trades among the professional orders and quotations at the best price according to an algorithm stored in the system memory 26.” *Id.* at col. 15, ll. 26–31. The prosecution history reflects that

the term “allocating” was added before the word parameters in the claim description “to more clearly show that parameters stored in the system memory are used to allocate portions of an incoming order or quotation.” Ex. 37 to DeVincenzo Decl. at ISE1398497.

CBOE admits that CBOEdirect contains a memory that performs the function of system memory means but claims that the corresponding required structure is missing. From the two fragments of the '707 specification quoted in the paragraph above, CBOE argues that the '707 patent reveals that parameters for professional orders are stored in the system memory, while parameters for public customer orders are stored in the bid matching process and offer matching process. Thus, for CBOEdirect to have the identical structure disclosed by the '707 patent, parameters for public customer orders would have to be stored in structure separate from that storing parameters for professional orders. ISE disagrees, arguing that there is no indication that the bid matching process and offer matching process are not stored in the system memory in the '707 patent. This argument was rejected by the court's construction, which requires structure to include not only memory but also bid matching process and offer matching process, three distinct components. If the bid matching process and offer matching process were considered part of the memory, they would not have been included as additional structure and the court would have adopted ISE's proposed structure, memory. Because it did not, a finding of identical structure is unavailable.

While structural identity is lacking, literal infringement may still be found if there is structural equivalence under § 112, ¶ 6. “A structure in an accused device is equivalent to the disclosed structure corresponding to a means-plus-function element if it is insubstantially different from the disclosed structure.” *Cortland Line Co. v. Orvis Co.*, 203 F.3d 1351, 1359

(Fed. Cir. 2000). Differences are insubstantial “if the assertedly equivalent structure performs the claimed function in substantially the same way to achieve substantially the same result as the corresponding structure described in the specification.” *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999). A component-by-component analysis is not proper; “structures with different numbers of parts may still be equivalent under § 112, ¶ 6.” *Id.* at 1268.

The way in which CBOEdirect stores parameters for allocating trades is not insubstantially different from the way in which the specification reveals the function is performed. While CBOEdirect’s memory stores rules for allocating trades, there is no evidence that any substructure exists that differentiates between the storage of rules for public customer and professional orders. Instead, rules for public customer and professional orders are stored directly in the memory. Even if the result of the two structures is the same, the way the result is achieved is substantially different, precluding a finding of literal infringement.

ISE also cannot avail itself of the doctrine of equivalents to show infringement. Where there is no structural equivalence under § 112, ¶ 6, the doctrine of equivalents only applies where after-arising technology is involved. *Nomos Corp.*, 357 F.3d at 1369. There is no question that memory predates the ’707 patent, rendering the doctrine of equivalents inapplicable. Thus, CBOE does not infringe claims 1-6, 9-10, and 22-23.

### **III. Matching**

CBOE further contends that, assuming Hybrid (and by implication CBOEdirect) is an automated exchange, summary judgment of noninfringement should be granted on the remaining method claims asserted against it, claims 35-36, 43, 45, and 56-58, which all contain the limitation “matching.” “[A] method claim is directly infringed only if each step of the claimed

method is performed.” *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008). Claim 35, on which claims 36, 43, and 45 are dependent, describes a process for trading financial instruments in which the process includes

first matching a first portion of the incoming order or quotation against the public customer order stored in the book memory based on the allocating parameter; and

second matching a remaining portion of the incoming order or quotation preferentially against professional orders and quotations with larger size based on the allocating parameter.

’707 Patent, col. 35, ll. 40–47. Claim 56, on which claims 57 and 58 are dependent, recites a process for trading financial instruments comprised of, among other things,

matching the incoming order or quotation against the orders and quotations stored in the book memory based on the allocating parameter;

querying an away market to determine an away market price;

comparing the best price with the away market price; and, if the best market price is as good or better than the away market price,

executing the step of matching.

*Id.* at col. 39, ll. 18–26.

The court construed “matching” to mean “identifying a counterpart order or quotation for an incoming order or quotation based on price.” Dkt. No. 286 at 5. “Allocating” means “dividing all or portions of the incoming order or quotation among the previously received orders and quotations.” *Id.* at 4. Allocating and matching are distinct processes. “Allocating parameters” are “rules for dividing portions of the incoming order or quotation among the previously received orders and quotations.” *Id.* at 2.

In CBOEdirect, an incoming order is matched with orders stored in the eBook based on price. The order will not be executed electronically if the price of the eBook is not at the NBBO.

The proper terminology for what occurs next is in dispute, but essentially, once the order is matched based on price, the order is executed against public customer orders in time priority. Then, UMA, which currently uses a pro rata formula, is applied to the remainder of the order. It is undisputed that these parameters are similar to those disclosed by claims 35 and 56 of the '707 patent; whether these steps are properly considered part of matching or allocating is disputed. *See* ISE's L.R. 56.1 Stmt. of Additional Facts ¶ 36 & CBOE's Resp.

CBOE contends that matching occurs solely based on price. Once counterpart orders are identified on a price basis, allocating occurs based on time priority, UMA, or any other allocating parameter that may be used. Thus, the process of identification is related only to price, while the rules for dividing are directly applied at the time of division. *See, e.g.*, Ex. 43 to DeVincenzo Decl. at CBOE000196801 ("Since [Hybrid] automatically executes all marketable non-market maker orders, an allocation mechanism is needed when multiple participants are at the same disseminated bid or offer. . . . If multiple customer orders exist at the disseminated price, those customers are *filled* in [first in, first out] fashion. . . . After the customers . . . *receive* their allocation, all remaining participants . . . *share* in the balance . . . ." (emphasis added)); Smith Decl. ¶¶ 23–24 ("Matching in the Hybrid Trading System is based solely on price, such that an incoming order or quotation is 'matched' with all price-compatible orders or quotations on the eBook. . . . The allocation process occurs after matching, and is accomplished based on rules for dividing an incoming order or quotation among orders and quotations in the eBook.").

ISE contends that matching is not confined solely to price but can also be based on other parameters, such as time priority or pro rata allocation. In other words, it claims that matching includes identifying counterparts based at a minimum on price, with other parameters also

potentially being applied, while allocating consists solely of dividing the incoming order based on the prior identification. This application of the court’s construction finds some support in a statement by CBOE’s counsel during the *Markman* hearing that “there can be other aspects for matching. But . . . matching must be based on price.” Ex. 66 to DeVincenzo Decl. at 138:11–12. The parties’ agreed construction of other claim terms involving matching also gives some credence to this theory, as, for example, the function of “means for matching the remaining portion with professional orders or quotations in the book memory means on a pro rata basis” was construed to be “matching . . . on a pro rata basis.”<sup>8</sup> Dkt. No. 286 at 7.

ISE, however, is attempting to rewrite the court’s construction, ignoring that matching is defined as identifying counterpart orders and quotations based on price (only), not on price plus any additional parameters. By adopting CBOE’s construction of the term, the court implicitly rejected ISE’s proposed construction, which left out any specific basis for the identification of counterpart orders and quotations. ISE’s argument would require the court to revise its construction or to find matching to be equivalent to allocating, which would vitiate the claim limitation and allow ISE to recapture “subject matter excluded by a deliberate and foreseeable claim drafting decision.” *Planet Bingo, LLC v. GameTech Int’l, Inc.*, 472 F.3d 1338, 1344 (Fed. Cir. 2006). While ISE may have intended for “matching” in the method claims to mean “allocating,” it cannot now rewrite the specification or the court’s claim construction so as to create a genuine issue as to whether CBOEdirect meets the “matching” limitation found in the

---

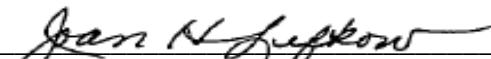
<sup>8</sup> CBOE claims that ISE’s counsel was confused about the idea of matching on a pro rata basis, but the parties nonetheless agreed on such a construction.

method claims.<sup>9</sup> Because the remainder of ISE's evidence on this issue conflates CBOE's use of the term matching in literature, patent applications, and other material with what the court has construed to be allocating, the court concludes that ISE has failed to present more than mere speculation that CBOEdirect performs the matching steps of the method claims. Thus, summary judgment of noninfringement will be entered on these claims.

### CONCLUSION AND ORDER

For the foregoing reasons, CBOE's motion is granted. The '707 patent is not infringed by CBOE. This case is terminated.

Dated: March 2, 2011

Enter:   
JOAN HUMPHREY LEFKOW  
United States District Judge

---

<sup>9</sup> The confusion between the two terms is not surprising, as they have been used inconsistently by the parties to mean different things. For example, UMA, the uniform matching algorithm, is an algorithm for dividing, i.e. allocating, orders even though its name includes the word matching.