

Federal Circuit Patent Bulletin: *Chicago Bd. Options Exch., Inc. v. Int'l Sec. Exch., LLC*

April 7, 2014

"[F]or means-plus-function claims, the corresponding structure in the specification must be a step-by-step algorithm, unless a general purpose computer is sufficient for performing the claimed function."

On April 7, 2014, in *Chicago Bd. Options Exch., Inc. v. Int'l Sec. Exch., LLC*, the U.S. Court of Appeals for the Federal Circuit (Rader, Reyna,* Wallach) affirmed the district court's judgment that CBOE did not infringe U.S. Patent No. 6,618,707, which related to an automated exchange for trading financial instruments, and reversed the judgment that Claim 2 of the '707 patent was invalid for indefiniteness. The Federal Circuit stated:

ISE argues that requiring it to prove that CBOEdirect is not integrated with Hybrid or the trading floor violates the mandate rule [which provides that "prior findings and the claim construction based thereon are the law of the case]." The district court correctly framed the factual issue remaining for the jury by requiring ISE to show that CBOEdirect did not include open-outcry. ISE recognizes that, in order to prove infringement, it must show that CBOEdirect is "a system for executing trades of financial instruments that is fully computerized, such that it does not include matching or allocating through the use of open-outcry." . . . CBOEdirect is a part of the larger Hybrid trading system. The Hybrid system does utilize, at least to some extent, "matching or allocating through the use of open-outcry." Thus, ISE must demonstrate that CBOEdirect is separate from the open-outcry aspects of Hybrid. The district court recognized this unresolved factual issue on more than one occasion. . . . We hold that, because this factual issue was unresolved in the previous appeal, the trial court did not violate the mandate rule by allowing this unresolved issue to go to the jury. . . .

[T]he district court found that claim 2 was indefinite because the specification did not disclose a step-by-step algorithm for performing the claimed function. *Aristocrat* and related cases hold that, for means-plus-function claims, the corresponding structure in the specification must be a step-by-step algorithm, unless a general purpose computer is sufficient for performing the claimed function. Such an "algorithm" may be expressed "in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure" to a person of ordinary skill in the art. We must also remember that

“a challenge to a claim containing a means-plus-function limitation as lacking structural support requires a finding, by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.”

We find that claim 2 is not indefinite because the specification discloses an algorithm for matching the remaining orders on a pro rata basis. First, “matching” itself is not indefinite, having been construed by this court as “identifying a counterpart order or quotation for an incoming order or quotation.” The remaining question then is whether the specification discloses an algorithm for “identifying a counterpart order” on a pro rata basis.

“Pro rata” means in proportion. The summary of the invention explains that pro rata assignments in the ‘707 Patent are made based upon order size. The specification specifically describes matching the “remaining” portion of orders on a size-based, pro rata basis, as recited in claim 2. [T]he specification explains that orders are matched in proportion to the size of the order requested by the professional. It also explains that, if the order sizes are equal for two professionals, the professional who placed the first order, gets matched first. Based upon this discussion of size-based, pro rata matching, a person of ordinary skill in the art would understand the algorithmic structure for performing the claimed function.

The specification discusses using a similar pro rata process to allocate orders. At times, the discussion of pro rata allocation and the discussion of pro rata matching somewhat overlap. According to CBOE, because this court construed allocating and matching as distinct processes, any discussion of pro rata allocating cannot provide structure for pro rata matching. It may be correct that, if the specification disclosed only pro rata allocation, there would not be sufficient structure for the claimed pro rata matching function. But this is not the case. As outlined above, the specification outlines an algorithm for matching on a size-based, pro rata basis. The disclosure of pro rata allocation does not detract from the disclosure of pro rata matching. Indeed, a person of ordinary skill in the art would likely look to the similar pro rata allocating process when implementing pro rata matching. Additionally, simply because the pro rata aspects of allocation and matching may be similar, or even the same, does not mean that the overall processes are no longer “distinct.” As an example, two distinct calculation processes may both use addition but remain distinct overall.

The district court erred in finding that there was clear and convincing evidence that the specification did not disclose sufficient structure such that a person of ordinary skill in the art would know how to match on a pro rata basis. While it is true that the specification also discusses pro rata allocating, this does not detract from the disclosure of pro rata matching such that claim 2 is indefinite. Accordingly, we reverse the district court’s

decision that claim 2 is indefinite.