

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

TRADING TECHNOLOGIES	)	
INTERNATIONAL, INC.,	)	
	)	
<i>Plaintiff,</i>	)	No. 10 C 715
	)	
v.	)	Judge Virginia M. Kendall
	)	
IBG LLC, <i>et al,</i>	)	
	)	
<i>Defendants.</i>	)	

**MEMORANDUM OPINION & ORDER**

One of IBG’s defenses in this case is that TT committed inequitable conduct during examinations and reexaminations of the patents-in-suit before the Patent and Trademark Office (“PTO”). TT now moves for summary judgment that it did not commit inequitable conduct. For the reasons set forth below, the Motion (Dkt. 1389) is granted.

**BACKGROUND**

The four patents-in-suit, the ‘132, ‘304, ‘411, and ‘996 Patents, are each directed—at least in part—to the front-end of an electronic trading system. (Dkt. 1461 ¶ 6.) In particular, the Patents describe a graphical user interface (“GUI”) that allows traders to submit electronic orders to an exchange. (*Id.*; Dkt. 1532 ¶ 2.)

In order for trading software to communicate with an exchange, the front-end connects to the exchange through a “gateway” designed to communicate with that exchange using the exchange’s required protocols. (Dkt. 1461 ¶ 5; Dkt. 1532 ¶ 1.) In the late 1990s, exchanges created technical manuals explaining the exchanges’ backend systems which enabled independent software vendors to develop GUI systems to view and interact with those backend systems. (Dkt. 1532 ¶ 3; Dkt. 1471 at p. 142.)

In 1998, a major futures exchange, the London International Futures Exchange (“LIFFE”) decided to move to fully electronic trading. (Dkt. 1532 ¶ 5.) Shortly thereafter, LIFFE published the LIFFE Connect API Manuals (“LIFFE Manuals”) and gave them to independent software vendors to create electronic trading GUIs that allowed traders to interface with and place orders via the LIFFE Connect backend system. (Dkt. 1398-3 at p. 5.) Software vendors like TT that provide front-end trading GUIs must develop gateways for their trading GUIs to access exchanges like the LIFFE exchange. (Dkt. 1461 ¶ 9.) The LIFFE Manuals describe, *inter alia*, the LIFFE API, which sets forth the protocols for gateways to access the LIFFE electronic exchange. (*Id.* ¶ 8.) IBG’s final invalidity contentions cite the LIFFE Manuals as prior art under 35 U.S.C. § 102. (Dkt. 1398-3 at p. 6.) IBG also cites TT’s actions vis-à-vis the LIFFE Manuals during proceedings before the PTO in support of its allegation that TT committed inequitable conduct. (Dkt. 1461 ¶ 7.)

Appendix G of the LIFFE Manuals discusses order handling. (Dkt. 1398-5 at pp. 89–92.) IBG relies in part on a diagram located within Appendix G for its contention that TT committed inequitable conduct. (*Id.* at p. 91; Dkt. 1398-3 at p. 13.) The diagram is reproduced below.

The sequence of central order book changes is described in the following diagram:

Price	After Step 1		After Step 5		After Step 8		After Step 11	
	Buy Vol	Sell Vol	Buy Vol	Sell Vol	Buy Vol	Sell Vol	Buy Vol	Sell Vol
97.31								
97.30		30		30				
97.29								
97.28								
97.27			50		50	30	20	
97.26								
97.25	50							
97.24								

According to TT, this diagram “shows a logical model of a sequence of changes in the central order book maintained by the trading host based on a 13-step scenario involving the receipt and matching of trade orders by the trading host.” (Dkt. 1461 ¶ 14.) In TT’s view, the diagram does not depict an order entry GUI. (*Id.*) To IBG, the diagram has direct relevance to frontend trading GUIs because: 1) it would be the type of information that a GUI developer would review in determining how to organize the frontend display of market information, 2) the diagram depicts an obvious way of arranging data (*i.e.*, dynamically updating bid/ask prices over time relative to a non-moving price axis), and 3) a named inventor of the TT patents, Jens-Uwe Schluetter, viewed “the API developer manual” at LIFFE’s headquarters sometime in the late 1990s. (Dkt. 1461 ¶ 14; Dkt. 1471-12 at p. 134; Dkt. 1532 ¶ 9); (*see also* Donefer Report, Dkt. 1471 at p. 263, explaining that a person of ordinary skill in the art looking to develop an accurate and efficient electronic trading GUI would look to the LIFFE Manuals to see how to make such a system interface with the LIFFE backend.) Schluetter, however, does not recall seeing any screenshots of a potential front end in the API user documentation that he reviewed. (Dkt. 1471-12 at p. 135.) After reviewing the API user documentation, Schluetter believes that he probably threw it away. (Dkt. 1461 ¶ 19.) TT’s expert, Bernard Donefer, testified that the diagram reproduced above does not portray a front-end GUI, but that it does depict “how we store [market data] in our computers,” . . . “which would teach one that might be a very good way to show it on your market data displays.” (Dkt. 1461 ¶ 15; Dkt. 1398-9 at p. 5.)

Between 200 and 2004, the ‘132 and ‘304 Patents were concurrently pending before the PTO. (Dkt. 1532 ¶ 15.) The same examiner, Mr. Weisberger, worked on both patents. (*Id.*) During prosecution of those patents, Weisberger issued a request for information under 37 C.F.R. § 1.105. (*Id.* ¶ 16.) That rule places a duty on a party seeking a patent to disclose all information known to

be material to the patentability of the invention. (*Id.* ¶ 17.) TT’s prosecution attorneys responded to this request by stating that “no known existing literature [was] used in the invention process.” (*Id.* ¶ 18.) TT did not disclose the LIFFE Manuals to the examiner during the initial examinations. (*Id.* ¶ 20.) Ultimately, the examiner allowed the ‘134 and ‘302 Patents. (*Id.* ¶ 19.)

The record does not reflect that TT’s attorneys involved in the prosecution of the ‘132 or ‘304 Patents before the PTO knew of the above diagram. (Dkt. 1461 ¶ 16.) IBG purports to deny this, but its denial just explains that Schluetter had seen the LIFFE Manuals and that therefore TT’s attorneys either failed to perform a reasonable inquiry or that they discovered Schluetter’s knowledge of the LIFFE Manuals and failed to disclose it to the examiner. (*See id.*) As explained above, however, Schluetter does not recall ever seeing the screenshots contained within the API Manuals. (Dkt. 1471-12 at p. 135.) IBG nonetheless contends that there is a “striking similarity between the concept drawing” and what ultimately became MD\_Trader and the LIFFE manual diagram, which is circumstantial evidence that Schluetter and his co-inventors relied on the diagram in creating MD\_Trader. (Dkt. 1461 ¶ 72.) No evidence suggests that TT’s other two inventors, Mr. Brumfield and Mr. Kemp, knew of the diagram depicted above. (Dkt. 1461 ¶¶ 17–18.)

MD\_Trader, TT’s invention, is a GUI design that, when used with X\_Trader, connected to the LIFFE exchange via a gateway using the exchange’s required protocols. (Dkt. 1532 ¶ 14.)

TT previously asserted the ‘132 and ‘304 Patents against eSpeed. (Dkt. 1461 ¶ 22.) During that litigation, eSpeed identified the LIFFE Manuals as additional prior art in its invalidity contentions. (*Id.* ¶ 23; Dkt. 1398-13 at p. 4.) The invalidity contention describes the LIFFE Manuals as showing “a series of diagrams where the bids and asks are updated in response to new market information and move on the screen when the inside market changes. (Dkt. 1398-13 at

p. 4.) David Silverman, eSpeed’s technical expert, testified during the *eSpeed* trial that the diagram in the LIFFE Manuals does not depict a trading screen, but is instead “an illustration of changes in the market for a programmer.” (Dkt. 1461 ¶ 66; Dkt. 1398-24 at p. 7.)

Following eSpeed’s identification of the LIFFE Manuals as prior art, TT submitted the LIFFE Manuals and eSpeed’s invalidity contentions to the PTO in subsequent proceedings involving the patents-in-suit. (Dkt. 1461 ¶ 24.) IBG purports to deny this, but presents no evidence that TT ever failed to do this; instead, IBG argues that TT “buried” the LIFFE Manuals and invalidity contentions in “voluminous” documentation submitted to the PTO. (*Id.* ¶¶ 24, 27.) The “voluminous materials” consisted of ten boxes of indexed documents. (Dkt. 1532 ¶ 26.) With regard to the reexamination of the ‘132 Patent, the PTO noted that because of the voluminous nature of the references, “only the most cursory review of the cited documents consistent” with PTO guidelines would be performed unless the petitioner is aware of any that might be of particular relevance. (Dkt. 1480-6 at p. 230; Dkt. 1532 ¶ 28.) The PTO made the same comment with respect to the reexamination of the ‘304 Patent. (Dkt. 1532 ¶ 29.)

In 2007, a third party sought reexamination by the PTO of the ‘132 Patent. (Dkt. 1461 ¶ 25.) During the reexamination, TT submitted eSpeed’s invalidity contentions and each version of the API Manuals. (*Id.* ¶¶ 27–28.) The examiners considered three versions of the LIFFE Manuals as indicated by their initials on an Information Disclosure Statement (“IDS”). (Dkt. 1461 ¶ 30; Dkt. 1398-14 at p. 31.) On another occasion, the examiners reviewed four versions of the LIFFE Manuals. (Dkt. 1461 ¶ 32.)

In 2010, another third party filed a reexamination request against the ‘132 Patent. (Dkt. 1461 ¶ 36.) This request specifically relied on the LIFFE Manuals and identified the above-depicted diagram. (Dkt. 1461 ¶ 39.) The PTO denied the second reexamination by explaining that

the diagram does not teach the elements of TT's patent claims because it "does not display the plurality of bids and the plurality of asks." (Dkt. 1461 ¶ 39; Dkt. 1398-16 at pp. 18–19.) The examiners concluded that "a reasonable examiner could not consider [the LIFFE Manuals] important in evaluating the patentability of claim 1 or claim 8" of the '132 Patent. (Dkt. 1461 ¶ 40; Dkt. 1398-16 at p. 19.)

The PTO considered the LIFFE Manuals a fourth time in connection with the '132 Patent when a third party petitioned the Central Reexamination Unit to review the PTO's refusal to grant the second reexamination request. (Dkt. 1461 ¶ 41; Dkt. 1398-17 at p. 17.) The Central Examination Unit denied the petition after considering the LIFFE Manuals and the "Freisen Reference." (Dkt. 1461 ¶¶ 42–43.)

In May of 2007, a third party filed a request for reexamination of the '304 Patent. (Dkt. 1461 ¶ 44.) TT submitted all four versions of the LIFFE Manuals and the eSpeed invalidity contentions as part of the reexamination. (*Id.* ¶¶ 44–51.) The reexamination resulted in the PTO declaring that "[t]he patentability of claims 1–40 is confirmed." (Dkt. 1398-19; Dkt. 1461 ¶ 52.) IBG contends that PTO made no such finding because 1) the PTO's review was cursory, 2) the PTO had to consider voluminous documentation, and 3) TT did not disclose the materiality of the LIFFE Manuals to the PTO. (Dkt. 1461 ¶ 52.)

TT's attorneys, Mr. Borsand and Mr. Triplett, testified that they did everything they could to assist the examiner during examination of the '134 and '302 Patents. (Dkt. 1461 ¶ 74.)

During prosecution of the '411 Patent, TT submitted an IDS identifying each version of the LIFFE Manuals, and the examiner reviewed them all, as evidenced by the examiner's initials. (*Id.* ¶¶ 53–54.) The PTO allowed the '411 Patent. (*Id.* ¶ 55; Dkt. 1041-1 at p. 181.)

During prosecution of the ‘996 Patent, TT submitted an IDS that identified each version of the LIFFE Manuals, and the examiner considered each of them, as evidenced by the examiner’s initials. (Dkt. 1461 ¶¶ 56–57.) The PTO allowed the ‘996 Patent. (*Id.* ¶ 58.)<sup>1</sup>

### LEGAL STANDARD

Summary judgment is proper when “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *see also Reed v. Columbia St. Mary’s Hosp.*, 915 F.3d 473, 485 (7th Cir. 2019). The parties genuinely dispute a material fact when “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Daugherty v. Page*, 906 F.3d 606, 609–10 (7th Cir. 2018) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). In determining whether a genuine issue of material fact exists, the Court draws all reasonable inferences in favor of the party opposing the motion. *Anderson*, 477 U.S. at 255; *Zander v. Orlich*, 907 F.3d 956, 959 (7th Cir. 2018).

### DISCUSSION

“Inequitable conduct is an equitable defense to patent infringement that, if proved, bars enforcement of a patent.” *Therasense, Inc. v. Becton, Dickinson*, 649 F.3d 1276, 1285 (Fed Cir. 2011). Inequitable conduct comes in three forms, each of which must be coupled with an intent to deceive: affirmative misrepresentation of a material fact, failure to disclose material information, or submission of false material information. *Innogenetics, N.V. v. Abbott Labs*, 512 F.3d 1363, 1378 (Fed. Cir. 2008). To prevail on an inequitable conduct defense, “the accused infringer must

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<sup>1</sup> The Parties also provide evidence regarding statements made by Judge Moran and counsel during a sidebar in the *eSpeed* trial and evidence regarding TT’s prosecution of a European patent before the European Patent Office. Judge Moran’s comment that it “sounds like inequitable conduct” (Dkt. 1532 ¶ 23) is irrelevant because what a particular judge said in an off-the-cuff remark in response to an argument of counsel has no bearing on whether TT should have produced the LIFFE Manuals during the original prosecution of the ‘132 and ‘304 Patents. What the European Patent Office did with a related patent is also irrelevant because Europe has a distinct patent regime. The Court does not find these topics relevant to the analysis the Court must perform to resolve the instant Motion.

prove that the patentee acted with the specific intent to deceive the PTO.” *Therasense, Inc.*, 649 F.3d at 1290. Whether information is “material” turns on whether absent the misrepresentation, non-disclosure, or false disclosure, the outcome of the PTO process would have been different (*i.e.*, “but-for materiality”). *Id.* at 1291. The accused infringer must present evidence of but-for materiality and intent to deceive by clear and convincing evidence. *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345 (Fed Cir. 2007).

IBG presents three pieces of evidence supported by adequate citations to the record in support of its contention that TT committed inequitable conduct. (*See* Dkt. 1461 ¶ 7.) First, during original prosecution of the ‘132 and ‘304 Patents, TT did not disclose the LIFFE Manuals and did not disclose Schluetter’s familiarity with documentation that appears to have been the LIFFE Manuals. Second, during reexamination of those patents, TT submitted the LIFFE Manuals as a reference, but included them as part of a voluminous submission and did not disclose Schluetter’s possible familiarity with those references. Finally, during prosecution of the ‘411 and ‘996 Patents, TT resubmitted the LIFFE Manuals reference as part of the same voluminous package of eSpeed materials and but only provided “minimal further commentary” regarding the teachings of the LIFFE Manuals. (Dkt. 1532 ¶ 37.)

First to the question of whether the initial nondisclosure was material, it is undisputed that none of the three TT inventors recall having seen the diagram contained within the LIFFE Manuals that IBG cites as prior art. IBG’s most persuasive piece of evidence here is that IBG’s expert, Bernard Donefer, testified that a person of ordinary skill in the art looking to develop an accurate and efficient electronic trading GUI would look to the LIFFE Manuals to see how to make such a system interface with the LIFFE backend. That suggests that it would have behooved the TT inventors to review the API Manuals. That being said, Donefer also explained that the API



manuals, and specifically the diagram, does not portray a frontend GUI. It is undisputed that the patents-in-suit are directed at least in part to a frontend GUI, so the relevance of the diagram is questionable. Donefer's own testimony raises serious questions about the materiality of the diagram. The fact that multiple examiners at the PTO later initialed as having reviewed the LIFFE Manuals reference and nonetheless allowed the patents is also strong circumstantial evidence that their initial nondisclosure does not rise to the level of "but-for" materiality. Here, it is not even a counterfactual; it is a fact that when presented with the LIFFE Manuals, the PTO still allowed the patents. Where an examiner initials a reference, the Court must assume that the examiner considered the reference. *Molin PLC v. Textron, Inc.*, 48 F.3d 1172, 1184 (Fed. Cir. 1995). Here, it is undisputed that the LIFFE Manuals were submitted for each of the patent reexaminations, the examiners initialed the reference every time, and the examiners allowed the patents every time.

There is also no evidence that TT attorneys knew about the API Manuals during original prosecution of the patents. Schluetter had seen "API user documentation" prior to developing MD\_Trader, but he does not recall seeing the diagram that is the centerpiece of IBG's inequitable conduct defense. If the inventors themselves were not aware of the diagram at issue, there is no basis for inferring that TT's attorneys intended to deceive the PTO through its initial nondisclosure of the LIFFE Manuals.

Second, the fact that TT submitted "voluminous" amounts of documentation to the PTO during the various patent reexaminations is not a misrepresentation, non-disclosure, or false disclosure, so it cannot by definition form the basis of an inequitable conduct claim. Of course, the PTO did request that TT highlight any references that it believed to be of particular significance and TT did not highlight the LIFFE Manuals. But again, TT's decision not to highlight the LIFFE Manuals is consistent with its own understanding that the LIFFE Manuals are of limited relevance

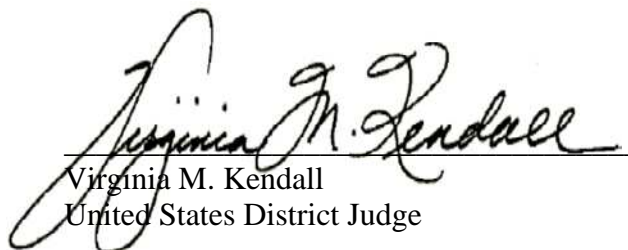
because they are not directed to a frontend GUI design. Even assuming that TT should have highlighted the LIFFE Manuals during the reexaminations, it is undisputed that the PTO still reviewed the LIFFE Manuals and allowed the patents.

Finally, IBG does not cite any authority for the proposition that TT needed to provide additional commentary regarding the LIFFE Manuals during prosecution of the '996 and '411 Patents. It is undisputed that TT provided all of the relevant documentation to the PTO. Given the undisputed evidence in the form of testimony from Donefer, Silverman, and Schluetter that the diagram in the LIFFE Manuals does not depict a frontend GUI, it is unclear why the LIFFE Manuals required additional commentary. In any event, TT submitted the documentation and the PTO reviewed the documentation, negating any inference that there was a material misrepresentation, nondisclosure, or false disclosure, or that TT intended to deceive the PTO.

On this record, no reasonable jury could conclude that clear and convincing evidence shows that TT made a material misrepresentation, nondisclosure, or false disclosure before the PTO and that TT intended to deceive the PTO. Accordingly, IBG's inequitable conduct defense fails.

## CONCLUSION

For the reasons set forth above, TT's Motion for Summary Judgment of No Inequitable Conduct is granted.<sup>2</sup>



Virginia M. Kendall  
United States District Judge

Date: November 29, 2020

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<sup>2</sup> TT also purports to seek attorney fees for the costs of having to defend against the inequitable conduct claim, but TT cites no authority for the proposition that it is entitled to fees. TT's briefings only give this issue cursory attention. Lacking any substantive briefing on the matter, the Court denies the request for fees.