

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

**ROBERT E. MORLEY, JR., et al.** )  
)  
**Plaintiffs,** )  
)  
**vs.** )  
)  
**SQUARE, INC., et al.,** )  
)  
**Defendants.** )

**Case No. 4:14cv172  
Case No. 4:10cv2243 SNLJ  
CONSOLIDATED**

**and** )  
**SQUARE, INC., et al.** )  
)  
**Plaintiffs,** )  
)  
**vs.** )  
)  
**REM HOLDINGS 3, LLC,** )  
)  
**Defendant.** )

**MEMORANDUM AND ORDER**

This matter is before the Court on plaintiffs’ motion to exclude in part the testimony of defendants’ expert Dr. Daniel Engels (#327). Plaintiffs seek to prove, among other things, that the defendants misappropriated plaintiffs’ trade secrets. Plaintiffs allege that defendants have been using the Square credit card reader (which plugs into a smartphone

via the phone's headphones jack) in violation of trade secret law. In particular, plaintiff

Dr. Robert Morley recites his trade secrets as follows<sup>1</sup>:

1. Dr. Morley's headphone-jack card reader invention, which is defined in the following patent claims:
  - a. All claims of the '729 patent;
  - b. All claims of the '394 patent;
  - c. Claims 1–6 and 14–20 of the '248 patent;
  - d. All claims of the '946 patent;
  - e. All claims of U.S. Patent Application 14/083, 315;
  - f. All claims of U.S. Patent Application 14/444,608;
  
2. Dr. Morley's algorithm for decoding an audio signal from a headset-jack card reader on a smart phone, comprising the steps:
  - a. Peak detection;
  - b. Determining 1s and 0s from the distance between peaks;
  - c. Start sentinel detection;
  - d. Error checking: parity and longitudinal redundancy check;
  - e. Framing of 5 bit characters in track 2;
  - f. Odd parity bit check;
  - g. End sentinel detection;
  - h. Determination of stable 0s duration in leading 0s;
  - i. Low pass filtering to reduce noise;
  - j. Inverse filtering to undo phase distortion of high pass filter.
  
3. The trade secret idea of partitioning the functions of a traditional magnetic stripe card reader such that the decoding and subsequent (e.g., communications) functions are performed on a cell phone, and the electrical components of the card reader device need only comprise a readhead, one or more resistors, and a headphone-jack plug.

Defendants have retained Dr. Daniel Engels, a technical expert, to evaluate the value of Morley's trade secrets and Square's use of them. In the instant motion, plaintiffs seek exclusion of that part of Engels's testimony that conducts what plaintiffs believe is

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<sup>1</sup> See this Court's April 22, 2016 memorandum and order (#351) regarding defendants' summary judgment motion for further information on these patents and other matters. The patents referred to by the trade secret recitations are patents owned by plaintiffs that are or have been in re-examination proceedings.

analysis based on patent law. Plaintiffs argue that such an analysis is both inappropriate and prejudicial in a trade secret case, and that, as a result, this Court should exclude any such testimony by Dr. Engels.

This Court must act as a “gatekeeper” to “insure that proffered expert testimony is both relevant and reliable.” *Wagner v. Hesston Corp.*, 450 F.3d 756, 758 (8th Cir. 2006) (quoting *Anderson v. Raymond Corp.*, 340 F.3d 520, 523 (8th Cir. 2003)); see also *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993). Federal Rule of Evidence 702 governs the standard for this Court’s admission of expert testimony. It provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

An expert opinion is inadmissible if based on incorrect legal standards. *Am. Med. Sys. v. Laser Peripherals, LLC*, 712 F. Supp. 2d 885, 901 (D. Minn. 2010); *Carlson v. C.H. Robinson WW, Inc.*, 2005 WL 758601, at \*4 (D. Minn. Mar. 30, 2005) (striking expert opinion that relied on incorrect, more stringent standard than applicable one, because the mistake “renders her conclusions unreliable”). Here, the relevant standard is whether plaintiffs’ trade secrets were generally known to, or readily ascertainable to others in the industry. § 417.453(4)(a) RSMo. See, e.g., *Surgidev Corp. v. Eye Tech., Inc.*, 828 F.2d

452, 456 (8th Cir. 1987) (affirming district court finding that trade secret was not generally known by others in the subject industry). Trade secret law does not require the type of novelty and nonobviousness required in patent law. See *AvidAir Helicopter Supply, Inc. v. Rolls-Royce Corp.*, 663 F.3d 966, 972-73 (8th Cir. 2011).

Plaintiffs' argument is two-fold. First, plaintiffs believe Engels ignores the "general knowledge of the industry" standard in favor of a stricter, patent-like analysis, which views individual pieces of "prior art" in isolation. "Prior art" is a term frequently used in patent law and refers to "relevant knowledge, acts, descriptions and patents which pertain to, but pre-date, the invention in question." *Voice Capture, Inc. v. Intel Corp.*, 354 F. Supp. 2d 997, 1000 (S.D. Iowa 2004) (quoting *Mooney v. Brunswick Corp.*, 663 F.2d 724, 733 (7th Cir. 1981) (citing 35 U.S.C. § 102)). Engels identifies and describes a number of instances of "prior art" in his report. He opines that those prior art references show that Morley's "trade secrets" were known and readily ascertainable, as they were easily acquired through internet searches in 2009. These instances of "prior art" were central to reexamination proceedings for Morley's patents.

Plaintiffs, however, argue that trade secret protection is warranted even for "a device or process which is clearly anticipated in the prior art," so long as it was not generally known. Restatement of Torts § 757, cmt. b. Plaintiffs complain that Engels's analysis says nothing about the "general knowledge" of the industry. Rather, he assumes that industry players seeking to accept payments by cell phones would have known all the

contents of all relevant documents on the internet.<sup>2</sup> Plaintiffs contend this is “too great an analytical gap” to present a reliable expert opinion and must be excluded. *Bland v. Verizon Wireless LLC*, 538 F.3d 893, 898 (8th Cir. 2008) (opinions with too great a gap between data and conclusions should be excluded). This Court disagrees. Engels demonstrates that he understands the law to be applied to whether or not Morley’s ideas constitute trade secrets. Plaintiffs will have the opportunity to cross-examine Engels on these matters.

Relatedly, defendants say they are entitled to rely on public documents, including patents that contain same or substantially similar information to that contained in the alleged trade secrets, because those documents show the alleged trade secret was either generally available in the industry or obvious based on what was commonly known. See *U.S. Gypsum Co. v. Lafarge N. Am., Inc.*, 670 F. Supp. 2d 748, 763-64 (N.D. Ill. 2009). Engels says he is trying to show that others in the industry were trying to solve the same problem as Morley. Again, any objection to Engels’s reliance on such publicly available documents is more properly addressed through cross-examination and not exclusion.

Second, plaintiffs argue that Engels impermissibly relies on Patent Office proceedings. In particular, plaintiffs object to Engels’s highlighting the results or

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<sup>2</sup> Engels says a 2016 Google search shows that industry players would have been able to find the alleged prior art. But plaintiffs argue that Engels has no basis for assuming that a person in the mobile payments industry would have thought to conduct that search, nor does Engels provide any indication that his 2016 Google search results would look identical to results from a search conducted in 2009.

existence of the proceedings before the Patent & Trademark Office (“PTO”) and Appeals Board (“PTAB”), citing the different standards of proof and evaluation in Patent Office-related proceedings. Other courts have found that PTO-related proceedings’ different standards of proof and evaluation makes the substance of those proceedings more prejudicial than probative. *Wis. Alumni Research Found. v. Apple Inc.*, 2015 WL 5704356, at \*7 (W.D. Wis. Sept. 29, 2015) (granting motion in limine excluding testimony regarding inter partes review proceedings because “any probative value of this evidence is substantially outweighed by the risk of unfair prejudice, as well as the risk of jury confusion. The IPR proceeding is subject to different standards, purposes and outcomes than both the original prosecution and this court proceeding.”); see also *Interdigital Commc'ns Inc. v. Nokia Corp.*, 2014 WL 8104167, at \*1 (D. Del. Sept. 19, 2014) (Any “probative value is greatly outweighed by the expenditure of time that would be required to give the jury the full context necessary to fairly evaluate the evidence. Further, because of the complexity involved in giving the full context, there would also be a significant risk of confusion of the issues.”).

Defendants says those cases are distinguishable because, there, the PTO proceeding and jury were deciding the same issues of patent claim validity --- so defendants posit that confusion would outweigh probative value. Defendants suggest they should be able to use the PTO’s underlying findings, which they say are directly relevant to what was generally known in the industry. Further, defendants say Morley made admissions

regarding the level of general knowledge in the industry that are directly relevant to his trade secret allegations.

In addition, defendants contend that that because plaintiffs identified the patents in defining their trade secrets, they put PTO proceedings at issue. However, this Court finds there is a distinct difference between using language from the patents to describe trade secrets and invoking the proceedings themselves.

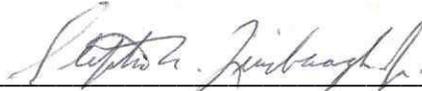
Finally, defendants say they are entitled to rely on PTO proceedings because plaintiffs relied on evidence from the PTO. For example, plaintiffs cited to a declaration from the PTO proceedings regarding the state of the industry at the time of Square's launch. Plaintiffs' expert also relies on the lack of citation by Square of any "anticipation reference" during the PTO proceedings to argue that the trade secrets were not generally known. And, finally, plaintiffs used the fact that the PTO initially issued patents to Morley to show that his ideas were new and nonobvious.

The Court also notes that the PTO-related proceedings are still in progress: the PTO issued the patents, cancelled the patents, and at least some matters are still on appeal. Therefore, the uncertainty of the PTO proceedings' outcome provides additional reason to carefully consider what role those proceedings have in this case. The Court will allow the parties to make use of the testimony and other evidence used in the PTO proceedings, but the substance of the proceedings (including findings by the PTO or PTAB) shall not be presented to the jury. The Court will consider an appropriate instruction to be given to the jury at trial.

Accordingly,

**IT IS HEREBY ORDERED** that plaintiffs' motion to exclude in part the testimony of Dr. Daniel Engels (#327) is GRANTED in part and DENIED in part, as described herein.

Dated this 11th day of May, 2016.



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STEPHEN N. LIMBAUGH, JR.  
UNITED STATES DISTRICT JUDGE