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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

ATMEL CORPORATION, a Delaware corporation; ATMEL SWITZERLAND, a corporation; ATMEL FRANCE, a corporation; and ATMEL SARL, a corporation,

Plaintiffs,

v.

AUTHENTEC, INC., a Delaware corporation,

Defendant.

Case No. 06 CV 2138 CW (EDL)
Case No. 07 CV 03331 (CW)

AUTHENTEC'S OPPOSITION TO ATMEL'S MOTION TO STRIKE THE DECLARATION OF DR. ROGER D. MCWILLIAMS

I. INTRODUCTION

Atmel's motion to strike the Declaration of Roger D. McWilliams should be denied because it lacks any basis in law or fact. Although Atmel's motion is styled as a "*Daubert*" challenge, Atmel does not come forward with any law supporting exclusion of Dr. Williams' testimony, or any evidence in the form of expert testimony or otherwise that raises any questions at all about Dr. McWilliams' methodology or conclusions. Rather, Atmel's motion is an improper attempt to re-argue its summary judgment position. Indeed, Atmel's entire first argument is premised on cases assessing the merit of a noninfringement defense and which do not even discuss the exclusion of expert testimony – under *Daubert* or otherwise.

Applying the proper tests, there is no question that Dr. McWilliams' testimony meets each criterion for admissibility. Dr. McWilliams provided this Court with meaningful scientific guidance, useful in aiding the Court to properly understanding the function of the components of the accused products in the context of Atmel's infringement contentions. His experimentation confirms, as a matter of easily repeatable science, that Atmel's infringement claims are baseless. Moreover, Atmel fails to challenge, and thereby concedes, that Dr. McWilliams is fully qualified to opine on the subject matter in his declaration—the accused products' use of external radio frequency ("RF") excitation and detection. Indeed, Dr. McWilliams is a world-leading experimental physicist at the University of California, and, through his company McWilliams Scientific, he leads advanced experimentation regarding RF transmission and detection in both the public and privates sectors.

Rather than challenging Dr. McWilliams' qualifications, Atmel bases its motion to strike on attorney argument that Dr. McWilliams' experiments used "modified AuthenTec sensors and abnormal operating conditions." As fully explained below, Atmel mischaracterizes Dr. McWilliams' methodology and the applicability of his results. In short, the Court should reject Atmel's motion to strike because Dr. McWilliams' qualified expert testimony satisfies all the required indicia of admissibility under Federal Rule of Evidence 702.

II. ARGUMENT

A. ATMEL'S CASES DO NOT ADDRESS STANDARDS FOR ADMISSION OF EXPERT TESTIMONY IN PATENT CASES

Atmel's entire first argument is premised on its claim that Dr. McWilliams' testimony should be excluded from the summary judgment proceedings as "completely unhelpful" because it fails to comport with the alleged governing standard for determining patent infringement. Atmel, however, does not cite a single case that supports its exclusion theory. Relying primarily on two *Hilgraeve* cases, Atmel claims that expert testimony must be "disregarded" if it does not use a comparison of the "unmodified accused instrument under normal conditions" to the claim language. These cases, however, neither stand for this proposition, nor support the exclusion of expert testimony for the reasons Atmel claims – or any reason at all. In fact, the *Hilgraeve* cases do not even mention *Daubert*, or the exclusion of expert testimony.

The issue in each of the two *Hilgraeve* cases that Atmel cites was solely whether or not summary judgment of noninfringement was properly granted in view of competing expert testimony.[1] In each case, the district court and the Federal Circuit fully considered and carefully weighed the expert testimony presented *by both sides*; no testimony was excluded. The issue in both cases was whether a method that required that certain events occur at a certain time (before virus scanning) was infringed by the accused products. After considering the tests and testimony of the experts, the Court concluded in one case that the tests were "inconclusive on the issue of infringement" (*Symantec* at 1344)[2] and in the other neither party's expert "definitively answer[ed] the fundamental question of whether 'storage' … occurs before or after scanning" based on the tests that were performed. *McAfee*, 224 F.3d at 1355.

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[1] *Hilgraeve Corp. v. Symantec Corp*, 265 F.3d 1336, 1338 (Fed. Cir. 2001); *Hilgraeve v. McAfee*, 224 F.3d 1349, 1350 (Fed. Cir. 2000).

[2] Rather it found that although the expert could get the accused product to operate in a non-infringing manner, this did not necessarily mean that it did not infringe in other operating modes. *Id.* at 1343-44.

Thus, even if Atmel were right about its "modification theory," which it is not as set forth in detail below, the *Hilgraeve* cases, do not, as Atmel posits, support the exclusion of the McWilliams testimony as "completely unhelpful," or even discuss any circumstances under which exclusion could be proper, which it clearly is not here.[3] Instead, Atmel cites these cases solely in support of its efforts to re-argue the merits of its summary judgment position, an invitation which this Court should not accept. The other cases Atmel cites likewise offer no support for its exclusion theory.[4] In fact, the *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354 (Fed. Cir. 2006) and *Doorking, Inc. v. Sentex Sys., Inc.*, 19 Fed. Appx. 872 (Fed. Cir. 2001) (unpublished) cases do not address the admissibility of expert testimony.[5]

In sum, Atmel's entire first argument is based on a significant misstatement of applicable law. This argument, and Atmel's second argument regarding reliability, is also based on a significant misstatement of the facts and circumstances relating to the tests performed by Dr. McWilliams, which as set forth in detail below, meet the applicable tests for admissibility, and are particularly helpful in view of the claims at issue here. Dr. McWilliams did not radically modify the sensors, or improperly exclude the drive ring. Instead, his experimentation confirms, as a matter of easily repeatable science, that Atmel's infringement claims are baseless.

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[3] The Court actually stated that "tests of an accused device under unusual conditions are not *necessarily* relevant to an infringement analysis," implicitly acknowledging that such tests could be relevant. *Id.* at 1343 (emphasis added).

[4] The only patent cases Atmel cites to support exclusion of expert testimony actually support its inclusion. The court upheld the district court's admission of expert testimony in *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1394 (Fed. Cir. 2003). In *DSU Med. Corp. v. JMS Co., Ltd.*, the court only excluded speculative expert testimony at trial on two discrete issues, but allowed the expert's testimony on all other issues for which he was proffered. 296 F. Supp. 2d 1140, 1159 (N.D. Cal. 2003). Last, in *Tech. Licensing Corp. v. Gennum Corp.*, the expert's testimony was excluded only because his damages calculation was based on "purely fictional circumstances." No. 3-01-4204, 2004 U.S. Dist. LEXIS 10604, *28 (N.D. Cal. Mar. 26, 2004).

[5] The *Golden Blount* opinion does not even mention expert testimony, and the *Doorking* opinion references it only in passing. Neither case concerns any issue related to a *Daubert* challenge or exclusion of expert testimony.

B. THE MCWILLIAMS TESTIMONY IS ADMISSIBLE

Under Federal Rule of Evidence 702, testimony from a witness qualified as an expert is admissible if (1) "[it] is based upon sufficient facts or data," (2) "[it] is the product of reliable principles and methods," and (3) "the witness has applied the principles and methods reliably to the facts of the case." *Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1320-21 (9th Cir. 1994). Dr. McWilliams' testimony fully satisfies each of these criteria.

1. Atmel Does Not And Cannot Challenge Dr. McWilliams' Qualifications.

Dr. McWilliams's expertise meets the threshold criteria of Rule 702—he is more than qualified to opine on the subject matter of his declaration. Atmel concedes his expertise by its silence on this issue. The Court should therefore find that Dr. McWilliams is qualified to opine on the subject matter of his declaration.

2. Atmel Offers No Expert Testimony Or Evidence To Challenge Dr. McWiliams' Methodology Or Conclusions

In addition to not challenging Dr. McWilliams' qualifications, Atmel offers nothing but attorney argument, to challenge Dr. McWilliams methodology, the instruments he used, or his conclusions. Atmel makes no attempt to provide any expert testimony or authority to support its arguments.

3. Dr. McWilliams Based His Testimony On Sufficient Facts And Data.

Dr. McWilliams testified that the data he gathered and the extent of his experimentation was sufficient under the circumstances to assess whether the accused products could operate without contact between the finger and the sensor.[6]

Dr. McWilliams employed three simple methods to determine whether the accused products have contact sensitive elements. None of these methods require extensive data gathering as the result—whether the accused products can detect a fingerprint or not—is easily observed.

[6] *See* Atmel Ex. NN at 161:4-23.

In the first method (¶¶ 7-10), Dr. McWilliams created a "variable air gap" between the finger and the protective layer on top of the accused devices "by placing conducting shims of various thicknesses on the external drive ring attached to the AuthenTec product housing." Dr. McWilliams performed this experiment to demonstrate that contact between the finger and the window corresponding to the detection matrix is not required for fingerprint detection.

Atmel challenges this first method by erroneously suggesting that Dr. McWilliams testified that the sensors were somehow improperly modified. Dr. McWilliams actual testimony was exactly opposite: "I have not modified the sensor surfaces at all by the introduction of shims or additional dielectrics."[7] In short, the addition of shims and dielectric materials in no way modified any properties of the accused devices that demonstrate "contact sensitivity," or lack thereof. Instead, the shims merely served as a measuring stick to quantify the size of the air gaps between the finger and the protective layer of the accused devices. The insertion of a ruler to measure a gap is not equivalent to an improper modification of the accused devices.

The second method (¶¶ 11-12) "was performed by placing a dielectric material 12.5 microns thick over the entire fingerprint. The radio frequency external excitation source was wired to the finger without disturbing the dielectric material covering the fingerprint." Dr. McWilliams performed this experiment to verify whether finger contact was required for the operation of the accused products.[8] This method in no way altered the surface of the accused devices or the detection matrix below the surface. This method in no way modified the RF signal that is normally applied to the finger; it simply rerouted the RF signal to a part of the finger that did not contact the accused device. Hence, neither the detection matrix nor the operation of the accused devices was modified.

This method demonstrated that the pixel antenna array of the accused detection matrix respond to the RF signal from the finger without contact between the finger and any surface of the accused devices. (Declaration of Peter Sherlock (Dkt. No. 431), ¶16). This confirmed exactly what

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[7] *Id.* at 99:20-24.

[8] *Id.* at 52:10-16.

AuthenTec's technical personnel told the Court. (*Id.*; Declaration of Dave Setlak (Dkt. No. 432), ¶¶2-4). Thus, the pixel antenna array is not comprised of "contact sensitive elements" as required by the asserted patent claims. In fact, as Atmel concedes, the accused "contact sensitive elements" in AuthenTec's products merely measure the strength of an electric field passively—they do not respond in any way to contact. (*See id.*)

Finally, in the third method (¶ 13), Dr. McWilliams "found that the sensor would operate properly without any contact between the finger and the drive ring or the protective coating on the sensor upper surface." With the drive ring disabled and a wire with a piece of copper foil at its end attached to the RF transmitter of the accused product, Dr. McWilliams used his left hand to hold the copper foil while his "right hand fingers were swept near the sensor." In this configuration, the accused devices could still detect a fingerprint "even though the right hand made no contact with the copper foil (i.e., the RF drive signal). This method, as with the others, did nothing to modify the basic operation of the components of the accused products at issue in this case.

4. Dr. McWilliams' Testimony Is The Product Of Reliable Principles And Methods Applied Reliably To The Facts Of This Case.

Dr. McWilliams testified that there is no accepted standard for determining contact sensitivity. Atmel cites this to argue his methods were unreliable. On the contrary, if there had been a standard and he did not employ it, then Atmel would have grounds to complain.

Given the lack of a standard here, Atmel's argument is inapposite as the question is whether Dr. McWilliams accurately measured air gaps between the finger and the sensor, from which measurements the Court may reasonably conclude that contact between the sensors and the finger is not required for their operation. Atmel did not even bother to ask whether Dr. McWilliams' measuring methods were reliable for controlling the air gaps. Nor did Atmel inquire into the accuracy of the measuring instruments he employed. Indeed, Atmel provides no authority to show that the use of a calibrated micrometer, laser and shims of known thickness to measure and verify air gap was in any way unreliable to the facts of this case. Dr. McWilliams produced this equipment at his deposition, and Atmel had every chance to investigate its reliability. That Atmel failed to investigate or challenge

the reliability of this equipment, or the principles and methods by which Dr. McWilliams employed it to measure and maintain the air gaps does not render his methods unreliable. Moreover, it is quite common for experts to conduct experimentation on accused products by using measurement devices or other means that modify the accused products' operation in some way in order to highlight the key operating features at issue. *See, e.g.*, *Linear Tech. Corp. v. Micrel Inc.*, No. C-94-1633 MHP, 2006 U.S. Dist. LEXIS 96860 **67-68 (N.D. Cal. June 9, 2006) (relying on expert testing of semiconductors in modes other than normal modes specified in datasheets for infringement analysis).

Plaintiffs also argue, without support, that "[t]he extreme brevity and lack of detail in Dr. McWilliams' methodology itself suggests that it is not reliable."[9] Rather than suggesting unreliability, Dr. McWilliams' brief methodologies instead are indicative of the elegant simplicity of these experiments. In short, Dr. McWilliams' experiments do not lend to themselves to complex data gathering. Namely, if there is a gap between the finger and the sensor and the sensor still reads a useable fingerprint, the only data required to be recorded is the size of the gap and whether the print is properly read and verified or not. That is precisely what Dr. McWilliams did.[10] Moreover, the reliability of these simple tests is underscored by their corroboration of the documentation and technical employee testimony provided by AuthenTec. The Court should therefore find that the simple methods employed by Dr. McWilliams corroborate and reliably show that the pixel antenna array in the accused devices is not contact sensitive.

Finally, Atmel focuses on alleged modifications to the drive ring in the second and third methods to raise the specter of unreliability. In particular, Atmel argues that Dr. McWilliams' opinion is unreliable because he allegedly arbitrarily excluded the drive ring from the definition of "sensor" and "sensing surface." Atmel's argument is misguided on all fronts. This argument is flawed for two reasons.

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[9] Dkt. No. 462 (Atmel's Notice of Motion and Motion to Strike the Declaration of Dr. Roger D. McWilliams) at 11:10-11.

[10] *See* Atmel Ex. NN at 146:1-7.

First, Dr. McWilliams used the same RF signal present on the drive ring under normal operation, thereby leaving undisturbed the configuration of the alleged "sensing elements" as well as the basic operation of the components of the accused device. Thus, the tests were reliable, and Atmel has no evidence to the contrary. Instead, Atmel complains about "intellectual exclusion" of the "drive ring." Even if "intellectual exclusion" of the "drive ring" was improper, which as set forth below it is not, it has no bearing on the reliability of the experimentation performed which included use of the normal RF signal supplied by the drive ring.

Second, with regard to the "intellectual exclusion" of the "drive ring" from the "sensor" and "sensing surface" in reaching his ultimate conclusions addressed in Section B.3 and C.2 of Atmel's Motion, Dr. McWilliams opinions about whether the "drive ring" of the accused products is part of the "sensor" or "sensing surface" is consistent with the undisputed evidence, and more significantly, Atmel's own definitions of these terms. Dr. McWillliams testified that the "drive ring" was not part of the "sensor" or "sensing surface" of the accused devices, and in fact, was an external excitation source, based on his study and understanding that the "drive ring" does not detect and is a separate physical component from the pixel antennae array. (Atmel Ex. NN at 79:17-80:5.) Atmel's definition of "sensing surface" requires that the surface "detects finger contact." (Dkt. No. 398 at 5:17-18.) Moreover, Atmel's proposed definition of "sensor" requires that the sensor "detects" and be "integrated onto a semiconductor substrate." (*Id*. at 5:16-22.) The very testimony Atmel cites shows that Dr. McWilliams testimony, and "intellectual exclusion" of the "drive ring" was appropriate in view of Atmel's own proposed definitions. Thus, this aspect of Dr. McWilliams' opinion does not render it unreliable, but instead fully supports a finding of noninfringement applying Atmel's proposed claim constructions.

5. Dr. McWilliams' Testimony Is Useful To The Court.

"[E]xtrinsic evidence in the form of expert testimony can be useful to a court for a variety of pruposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a

particular meaning in the pertinent field." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006). The question before the Court is whether the pixel antenna array in the accused products is a matrix of "contact sensitive elements." AuthenTec came forward with documentation and engineer testimony demonstrating that AuthenTec's sensors do not include these elements. Dr. McWilliams' declaration, which includes the results of his air gap experiments, fully corroborates AuthenTec's evidence. Thus, although his declaration is not necessary to a finding of noninfringement in view of the other evidence in this case, Dr. McWilliams declaration is quite useful to the Court in deciding whether summary judgment is proper here. *Id.*

III. CONCLUSION

The Court should reject Atmel's motion to strike. Dr. McWilliams' highly qualified expert testimony will aid the Court in weighing the evidence here. The simple methods he employed fully corroborate what Atmel has known from the beginning of this case: AuthenTec's sensors do not include contact sensitive elements as required by the asserted claims of the patents-in-suit.

DATED: April 10, 2008

HOWREY LLP

By: */s/ Denise DeMory*
DENISE DEMORY

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