

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

JOHNSTECH INTERNATIONAL CORP.,
Plaintiff,
v.
JF MICROTECHNOLOGY SDN BHD,
Defendant.

Case No. [3:14-cv-02864-JD](#)

**ORDER RE RENEWED MOTION FOR
JUDGMENT AS A MATTER OF LAW;
NEW TRIAL**

Re: Dkt. No. 267

In September 2016, a jury found that defendant JF Microtechnology SDN BHD (“JFM”) had willfully infringed U.S. Patent No. 7,059,866 (the “’866 patent”) held by plaintiff Johnstech International Corp. (“Johnstech”). Dkt. No. 242. The jury awarded \$636,807 in lost profits. A motion for a permanent injunction and a motion for attorney’s fees and enhanced damages are pending. Dkt. Nos. 287, 303.

JFM seeks to overturn the jury verdict under Federal Rule of Civil Procedure 50, and in the alternative requests a new trial under Rule 59. JFM’s arguments are identical under both rules, and the requests are denied.

BACKGROUND

The events leading to trial were straightforward. Johnstech sued JFM for patent infringement in 2014 on the allegation that JFM’s Zigma device infringes the ’866 patent. Dkt. No. 1. The ’866 patent describes a test contactor used to test integrated circuit devices. The test contactor is comprised of conductive “contacts” inside a “housing.” The contacts are positioned between “leads” on the integrated circuit device to be tested, and “terminals or pads” on the “load board” of a testing machine. The integrated circuit is pressed against the test contactor, which deforms the elastomers holding the contacts and rotates the contacts so that they touch both the

1 integrated circuit’s leads and the testing machine’s load board terminals. The ’866 patent claims
2 to improve the prior art by allowing the contact to press against the integrated circuit leads and the
3 load board terminals with sufficient force while minimizing wear to the load board. *See Johnstech*
4 *Int’l Corp. v. JF Microtechnology Sdn Bhd*, No. 14-CV-02864-JD, 2016 WL 631936, at *1 (N.D.
5 Cal. Feb. 17, 2016) (“Claim Construction Order”).

6 During claim construction, the Court found that the asserted claims included “means-plus-
7 function” claims subject to 35 U.S. Code Section 112 Paragraph 6.¹ *Id.* at *2. Among other
8 terms, the Court construed the “means for biasing” term in claim 1 as having the function of
9 “biasing the contact to the first orientation, wherein, as the contact is rolled between the first and
10 second orientations, sliding motion of the second end of the contact across the terminal is
11 substantially eliminated” and the structure of “one or more elastomers . . . , a flat surface of the
12 contact in engagement with the terminal pad . . . , and a tail end of the contact in engagement with
13 a wall of the housing.” *Id.* at *6-*8. The Court construed “substantially eliminated” as
14 “approximately eliminated” and found that “engagement” required direct engagement between the
15 contact and the housing wall. *Id.* at *8.

16 On JFM’s motion for summary judgment, the Court concluded that Zigma does not
17 literally infringe the ’866 patent because Zigma’s contact is not directly engaged with the housing
18 wall. *Johnstech Int’l Corp. v. JF Microtechnology SDN BHD*, No. 14-CV-02864-JD, 2016 WL
19 4242220, at *2 (N.D. Cal. Aug. 11, 2016). In September 2016, the parties had a six-day trial on
20 whether Zigma infringes the ’866 patent under the doctrine of equivalents. *See id.* at *4. At the
21 close of evidence, JFM moved for judgment as a matter of law under Rule 50(a) on infringement
22 and Johnstech’s calculation of damages. *Tr.* at 811-13;² Fed. R. Civ. P. 50(a). The Court took
23 JFM’s motion under submission.

24
25
26 _____
27 ¹ The ’866 application was filed in 2004, so the Court refers to the version of Section 112 that
28 existed before the America Invents Act took effect. The AIA replaced Paragraph 6 of Section 112
with Section 112(f).

² “Tr.” refers to the trial transcripts, available at Dkt. Nos. 227, 229, 231, 233, 238, and 240.

1 motion is limited to arguments that were raised in the movant’s pre-verdict motion; arguments not
2 raised before the case was submitted to the jury are waived. *Freund v. Nycomed Amersham*, 347
3 F.3d 752, 761 (9th Cir. 2003); *ClearValue, Inc. v. Pearl River Polymers, Inc.*, 668 F.3d 1340,
4 1343 (Fed. Cir. 2012) (law of regional circuit determines Rule 50 waiver).

5 An initial problem with JFM’s 50(b) motion is that it makes several arguments that were
6 not properly preserved for post-trial consideration. JFM challenges the jury’s findings of
7 infringement, willfulness, and validity, and also argues that Johnstech was not entitled to lost
8 profits as a matter of law. But JFM made no mention at all of willfulness, validity, or the form of
9 damages in its 50(a) motion during trial. Tr. at 811-13. Those arguments are waived for JMOL
10 purposes. In addition, JFM acknowledges that it waived any objections to damages in the form of
11 lost profits because it expressly agreed to the lost profits jury instructions, and concedes that the
12 damages award was based on substantial evidence presented at trial. Dkt. No. 299 at 8-10.
13 Consequently, the Court will consider only the Rule 50 argument on the infringement verdict.

14 JFM says the jury’s finding of infringement under the doctrine of equivalents is without
15 substantial evidentiary support because Zigma’s structure does not satisfy the “means for biasing”
16 requirement in claim 1. Infringement is a question of fact, and the Court’s review of the jury’s
17 finding is limited to whether there was substantial evidence in the record to support it. *Apple Inc.*
18 *v. Samsung Elecs. Co.*, 839 F.3d 1034, 1040 (Fed. Cir. 2016).

19 The record amply establishes a sound basis for the infringement verdict, and JFM has not
20 shown anything to the contrary. As a threshold matter, the infringement challenge is undermined
21 by JFM’s lack of adherence to the Rule 50 standard. Rather than focusing on the sufficiency of
22 the evidence admitted at trial, JFM treats the verdict as an open question effectively subject to de
23 novo review. Most of its arguments, for example, go not to the sufficiency of the evidence but
24 merely to debating the jury’s decision to accept Johnstech’s evidence over JFM’s. JFM also
25 rehashes arguments rejected in claim construction and summary judgment without any attempt to
26 justify reconsideration on the basis of developments at trial. This overall approach is not the
27 optimal way to challenge a verdict under Rule 50.

28

1 Looking past this impediment, JFM does not raise any meaningful question of insufficient
2 evidence. “A finding of infringement under the doctrine of equivalents requires a showing that the
3 difference between the claimed invention and the accused product was insubstantial. One way of
4 doing so is by showing on a limitation by limitation basis that the accused product performs
5 substantially the same function in substantially the same way with substantially the same result as
6 each claim limitation of the patented product. The function-way-result test is particularly suitable
7 for analyzing the equivalence of mechanical devices.” *Crown Packaging Tech., Inc. v. Rexam*
8 *Beverage Can Co.*, 559 F.3d 1308, 1312 (Fed. Cir. 2009).

9 JFM’s primary argument is that the evidence at trial showed that the Zigma’s indirect
10 engagement design was an intentional choice to achieve benefits unrelated to reducing load board
11 wear. It is true that JFM witnesses testified that indirect engagement promotes some non-zero
12 sliding in order to shorten the wiping stroke between the integrated circuit and the contact, and
13 reduces damage to the housing wall. But JFM overlooks the abundance of other evidence the jury
14 heard, too. This included testimony about JFM’s patent, which did not mention the benefit of a
15 shorter wiping stroke but did state that the rear elastomer between the contact and the housing wall
16 “provides a counter force . . . to protect the load-board from wear.” TX 12 at 6:42-44. It also
17 included testimony on cross examination by JFM’s founder Wei Kuong Foong, who agreed that
18 the JFM patent “describes using the rear elastomer to minimize wear to the load board.” Tr. at
19 553. In addition, Johnstech witness Michael Andres testified that Johnstech’s ROL 200 contactor
20 practices the ’866 patent and can handle 20 to 30 million insertions before housing wall erosion
21 becomes an issue, whereas the housing wall in Zigma and other competitors can withstand only 2
22 to 6 million insertions. Tr. at 250-51.

23 These and other portions of the trial record demonstrate that the parties contested whether
24 indirect engagement in Zigma was intended to produce benefits unrelated to reducing load board
25 wear. The jury properly resolved the factual dispute, and the existence of some evidence possibly
26 favorable to JFM in an otherwise disputed record does not call the verdict into question.

27 Looking at the infringement finding more broadly, substantial evidence supported the
28 jury’s presumed finding that Zigma and Johnstech’s claimed invention perform substantially the

1 same function in substantially the same way with substantially the same result. The record is well
2 stocked with evidence allowing the conclusion that Zigma performs the same function of
3 substantially eliminating sliding. Andres testified that as a person of ordinary skill in the relevant
4 art, he would understand the '866 patent's "sliding is substantially eliminated" limitation to mean
5 that sliding is substantially reduced relative to the extent of sliding in the prior art. Tr. at 222.
6 JFM says that the prior art cannot provide an appropriate benchmark for whether sliding is
7 substantially eliminated, but the Court already considered and rejected that in claim construction.
8 Specifically, the Court found that the '866 patent "suggests two boundaries -- on one side, an
9 apparatus that completely eliminates sliding (whose contact only rolls), and on the other side, an
10 apparatus that works by a primary mechanism of sliding, the Johnson patent described in the
11 prosecution history. . . . A person of skill in the art would be able to . . . determine whether his
12 product approximated or was equivalent to the former and so fell inside the claim." Claim
13 Construction Order at *9. As the claim construction order made clear, references to the amount of
14 sliding in the prior art were appropriate in this particular case in light of "the claim and the
15 explanation of it found in the written description of the patent, as well as . . . the patent's
16 prosecution history." *AquaTex Indus., Inc. v. Techniche Sols.*, 479 F.3d 1320, 1328 (Fed. Cir.
17 2007) (internal quotations and citations omitted).

18 Johnstech's expert witness Dr. Stuart Brown offered data from two different measurement
19 techniques to compare the amount of sliding in the prior art, in ROL 200, and in Zigma. Dr.
20 Brown explained that using an X-ray imaging technology called MicroCT, he measured the prior
21 art to slide between 165 and 270 microns, ROL 200 to slide between 25 and 55 microns, and the
22 Zigma to slide 95 microns. Tr. at 431. Then, using a computer-simulated technique called Finite
23 Element Analysis ("FEA"), Dr. Brown measured the prior art to slide 191 microns, ROL 200 to
24 slide 1 micron, and Zigma to slide 24 microns. Tr. at 441. Based on these measurements, the jury
25 could reasonably have concluded that Zigma substantially eliminates sliding. For example, the
26 jury could have looked to the FEA results, which indicated that Zigma reduces sliding over the
27 prior art by 87 percent. JFM's own expert witness Dr. Kim Parnell testified that he believed FEA
28 was the superior measurement approach over MicroCT. Tr. at 751. Although Dr. Parnell took

1 issue with how Dr. Brown had parameterized his FEA measurements and offered competing
2 results, the jury was not required to credit JFM’s figures over Johnstech’s.

3 The record also shows that the jury reasonably concluded that Zigma performs in
4 substantially the same way by using a stiff component touching the housing wall to engage the
5 contact. Andres offered uncontradicted testimony that Zigma uses a “high-durometer,” “70 Shore
6 A elastomer.” Tr. at 248. He stated that that material is “roughly the equivalent of tire rubber for
7 an automobile,” and Zigma’s precompression of the elastomer, along with its relatively large size,
8 makes the elastomer “perform as though it’s much, much stiffer.” Tr. at 248-50. JFM witness
9 Shamal Mundiyyath, head of design and development at JFM, admitted during cross-examination
10 that the material used in Zigma’s rear elastomer is “about as hard as it can go before it becomes
11 plastic.” Tr. at 659. From this testimony and other evidence, the jury had solid grounds for
12 concluding that Zigma’s engagement of the contact by a highly stiff, pre-compressed elastomer,
13 where the elastomer itself was directly engaged by the housing wall, is substantially equivalent to
14 direct engagement of the contact by the housing wall.

15 JFM argues that indirect engagement cannot be equivalent to direct engagement as a matter
16 of law because the ’866 patent requires direct engagement, and that requirement is effectively
17 eliminated, or “vitiating,” by a finding of infringement. The contention is not well taken. The
18 vitiating exclusion “is not an exception to the doctrine of equivalents, but instead a legal
19 determination that ‘the evidence is such that no reasonable jury could determine two elements to
20 be equivalent.’ [T]he vitiating test cannot be satisfied by simply noting that an element is
21 missing from the claimed structure or process because the doctrine of equivalents, by definition,
22 recognizes that an element is missing that must be supplied by the equivalent substitute.” *Deere &*
23 *Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1356-57 (Fed. Cir. 2012) (quoting *Warner-Jenkinson Co. v.*
24 *Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n.8 (1997)). The evidence here was adequate: Johnstech
25 presented evidence that the size and composition of Zigma’s rear elastomer allowed it to function
26 as a very stiff component between the contact and the housing wall, similar to the ’866 patent’s
27 description of a housing wall that directly engages the contact. *Id.* at 1357 (“reasonable jury could
28 find that a small spacer connecting the upper and lower deck walls represents an *insubstantial*

1 *difference* from direct contact”) (emphasis in original). The Zigma contact’s indirect engagement
2 with the housing wall via a stiff elastomer is not the “antithesis” of the direct contact described by
3 Johnstech’s patent. This case is readily distinguishable from the vitiation examples that JFM
4 offers. *See, e.g., Planet Bingo, LLC v. GameTech Int’l, Inc.*, 472 F.3d 1338, 1345 (“before” and
5 “after,” “minority” and “majority,” “mounted” and “unmounted” are examples of “antithesis”)
6 (listing cases).

7 Substantial evidence supports as well the jury’s conclusion that Zigma achieves
8 substantially the same result. Andres testified that engagement forces the contact in Zigma and in
9 ROL 200 to “move forward as it’s compressed.” Tr. at 250. In a typical two-elastomer system,
10 Andres stated, “the contact wants to move away from the computer chip as it’s being tested. . . .
11 It’s very difficult to make it move the opposite direction. But on the Zigma, it actually moves
12 forward.” *Id.*

13 Overall, there is no doubt that the trial record provided a firm foundation for the jury to
14 resolve the question of infringement under the function/way/result test. The verdict of
15 infringement is amply supported by the evidence. Because interchangeability is not necessary to
16 find infringement under the doctrine of equivalents, *see, e.g., Warner-Jenkinson*, 520 U.S. at 37,
17 and the jury was so instructed with JFM’s approval, Dkt. No. 222 at 24, the Court need not reach
18 JFM’s arguments on interchangeability.

19 **II. New Trial**

20 JFM also seeks a new trial under Rule 59. In our circuit, the grant of a new trial is
21 entrusted to the district court’s discretion. *City Sols., Inc. v. Clear Channel Commc’ns*, 365 F.3d
22 835, 843 (9th Cir. 2004). Under Rule 59, “a trial court may grant a new trial if ‘the verdict is
23 contrary to the clear weight of the evidence, or is based upon evidence which is false, or to
24 prevent, in the sound discretion of the trial court, a miscarriage of justice.’ . . . [A] district court
25 may not grant a new trial simply because it would have arrived at a different verdict.” *Silver Sage*
26 *Partners, Ltd. v. City of Desert Hot Springs*, 251 F.3d 814, 819 (9th Cir. 2001) (quoting *United*
27 *States v. 4.0 Acres of Land*, 175 F.3d 1133, 1139 (9th Cir. 1999)). A district court’s denial of a
28 motion for a new trial is reversible “only if the district court makes a legal error in applying the

1 standard for a new trial or the record contains no evidence that can support the verdict.” *Alford v.*
2 *Haner*, 446 F.3d 935, 936 (9th Cir. 2006); *see also Molski v. M.J. Cable, Inc.*, 481 F.3d 724, 729
3 (9th Cir. 2007). “Unlike a motion for judgment as a matter of law, a motion for new trial does not
4 have to be preceded by a Rule 50(a) motion prior to submission of the case to the jury.” *Freund*,
5 347 F.3d at 765.

6 JFM’s new trial motion is cursory in the extreme, consisting of a bare half-page of
7 argument made at the very end of its brief. Dkt. No. 267 at 25. It simply recites the standard for a
8 new trial and slaps that on its Rule 50 arguments. While the substantial evidence test under Rule
9 50 and the clear weight of evidence standard under Rule 59 have some analytical affinity, they are
10 separate inquiries, and JFM does not say a word substantively about the application of Rule 59
11 here. This default is problematic because JFM’s request for a new trial turns mainly on challenges
12 to willfulness and obviousness that are discussed solely in terms of judgment as a matter of law
13 but that are waived for Rule 50 purposes. In effect, JFM seeks a new trial under Rule 59 based on
14 the standards of Rule 50 for arguments that it cannot make under that rule. This unusual posture is
15 even more problematic because JFM’s arguments consist mainly of cataloguing the evidence it
16 considers favorable to its case, which is a far different exercise from directly addressing the Rule
17 50 question of whether substantial evidence supports the verdict, or the Rule 59 question of
18 whether the clear weight of the evidence supports the verdict. *See, e.g.*, Dkt. No. 267 at 21.

19 This alone is enough to deny a new trial. JFM has not demonstrated that the clear weight
20 of the evidence supports a new trial for any reason, and the Court has no concerns that the verdict
21 was in any way a miscarriage of justice. A good argument can be made that to avoid giving
22 unearned substance to JFM’s threadbare new trial request, any further discussion here is undue.
23 Even so, a few salient observations will help underscore the soundness of the verdict.

24 **A. Infringement**

25 JFM’s request for a new trial on the basis of the infringement verdict is easily dispatched.
26 As the Rule 50 discussion amply demonstrates, the verdict was supported by substantial evidence
27 and by no means contrary to the clear weight of the evidence as whole. There is no indication
28

1 whatsoever that false evidence was in play at any point in the trial, and the verdict does not come
2 close to a miscarriage of justice.

3 **B. Willfulness**

4 JFM's new trial request on willfulness is also unconvincing. Johnson testified that JFM
5 first contacted Johnstech in 2009 proposing to manufacture test contactors on behalf of Johnstech.
6 Tr. at 149-52. Johnstech, which had begun manufacturing the ROL 200, declined JFM's offer.
7 Afterwards, Johnstech learned from its customers that a "clone" of the ROL 200 had appeared on
8 the market -- JFM's Zigma. Tr. at 152-54. After Johnstech filed suit in June 2014 and through
9 October 2015, JFM continued to market Zigma and made nearly 300 sales in that sixteen month
10 period. Tr. at 472.

11 As shown in the JMOL discussion, the clear weight of the evidence did not favor JFM's
12 suggestion that it intentionally designed Zigma for indirect engagement to achieve benefits
13 unrelated to load board wear. And to the extent JFM attempted to proffer evidence against
14 willfulness, credibility problems undermined its persuasive value. For example, Mundiath was a
15 key witness for JFM on matters relating to willfulness, and his testimony at trial was at times
16 evasive or inconsistent with his deposition testimony. To illustrate, Mundiath was shown a JFM
17 document titled "Zigma Vs Rol200" that compared CAD drawings of Zigma and ROL 200. TX
18 37. He identified the document as drawn from JFM design history files. Tr. at 650. When asked
19 if he had compared Zigma to ROL 200 during the design process, Mundiath said, "No. . . . Not
20 while designing Zigma, but after the design was done, everything, all the whole design was frozen
21 And this is something I generated just to make sure that [Zigma was compatible with the
22 market]." *Id.* Counsel for Johnstech then read aloud a portion of Mundiath's deposition
23 testimony, where Mundiath had testified that the relevant document was prepared "during the
24 development time of Zigma." Tr. at 651. When pressed for further clarification, Mundiath
25 responded, "Why you joining together with ROL?" *Id.* In another instance, Mundiath testified
26 that after learning of Johnstech's June 2014 lawsuit against JFM, he personally evaluated the '866
27 patent and decided that Zigma did not infringe. Tr. at 638. On cross examination, counsel for
28 Johnstech showed Mundiath that he testified in deposition that he had no opinion on

1 infringement. Tr. at 641. When counsel for Johnstech asked Mundiath if he was changing his
2 testimony, Mundiath responded, “No. Now you’re asking me the earlier opinion, or new
3 opinion, or what? I don’t understand your question.” *Id.*

4 These exchanges are representative of the credibility issues that surfaced during cross-
5 examination, and they are properly considered in deciding against a new trial along with other
6 factors. *See Landes Const. Co. v. Royal Bank of Canada*, 833 F.2d 1365, 1371 (9th Cir. 1987).
7 Whether the Court will in turn award enhanced damages is a question that will be answered in a
8 separate order. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 n.13 (Fed. Cir. 2016).

9 **C. Validity**

10 At trial, JFM sought to challenge the ‘866 patent on anticipation and obviousness. JFM’s
11 post-trial motion makes just a single passing reference to anticipation, does not discuss the
12 applicable legal standard, and apparently concedes that evidence on anticipation was disputed at
13 trial. Dkt. No. 267 at 21. Johnstech’s opposition points out that JFM’s motion is predicated on
14 obviousness only, Dkt. No. 270 at 19, and JFM’s reply brief does not challenge that view or
15 otherwise discuss anticipation at all, Dkt. No. 272. Nor did JFM raise anticipation at the hearing.
16 *See* Dkt. No. 299. Consequently, by JFM’s own admissions, anticipation does not warrant a new
17 trial.

18 The obviousness verdict is also no reason to try the case again. A patent is invalid for
19 obviousness “if the differences between the subject matter sought to be patented and the prior art
20 are such that the subject matter as a whole would have been obvious at the time the invention was
21 made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C.
22 § 103.³ Obviousness is a mixed question of law and fact. *InTouch Techs., Inc. v. VGO*
23 *Commc’ns, Inc.*, 751 F.3d 1327, 1339 (Fed. Cir. 2014). In reviewing a jury’s black-box
24 obviousness verdict on a motion for a new trial, the Court presumes that the jury resolved the
25 underlying factual disputes in favor of Johnstech and will not disturb those presumed findings
26 unless they are contrary to the clear weight of the evidence. *Apple*, 839 F.3d at 1047; *Molski*, 481

27 _____
28 ³ Given the filing date of the ‘866 patent, the pre-AIA version of Section 103 applies here. The
differences between pre-AIA Section 103 and post-AIA Section 103 are not relevant to this case.

1 F.3d at 729. In light of those facts, the Court then examines the jury’s legal conclusion of
2 obviousness de novo. *Apple*, 839 F.3d at 1047.

3 In the ordinary course, the question of obviousness entails several factual inquiries: (1)
4 “the scope and content of the prior art,” (2) “differences between the prior art and the claims at
5 issue,” (3) “the level of ordinary skill in the pertinent art,” and (4) “indicia of obviousness or
6 nonobviousness” such as “commercial success, long felt but unsolved needs, [or] failure of
7 others.” *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966). “A determination
8 of whether a patent claim is invalid as obvious under § 103 requires consideration of all four
9 *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are
10 considered.” *Apple*, 839 F.3d at 1048 (citing *In re Cyclobenzaprine Hydrochloride Extended-*
11 *Release Capsule Patent Litig.*, 676 F.3d 1063, 1075-76 (Fed. Cir. 2012)).

12 The jury instruction on obviousness, which JFM agreed to, required consideration of each
13 of the four factors. Dkt. No. 222 at 30-31. Because issued patents are presumed valid and non-
14 obvious, the burden rests with JFM to “demonstrate by clear and convincing evidence that a
15 skilled artisan would have been motivated to combine the teachings of the prior art references to
16 achieve the claimed invention, and that the skilled artisan would have had a reasonable
17 expectation of success in doing so.” *InTouch*, 751 F.3d at 1347 (internal quotations and citations
18 omitted).

19 JFM’s motion barely addresses the *Graham* factors or its burden of proof, and amounts to
20 little more than a recitation of the testimony that JFM’s infringement expert offered at trial. The
21 Court is reluctant to take up the slack and march through obviousness issues that JFM did not
22 adequately brief. Nevertheless, for the sake of completeness, the Court will explain why none of
23 these issues support a new trial on obviousness. The Court’s discussion focuses on Claim 1 of the
24 ’866 patent, since all other asserted claims were dependent on Claim 1.

25 The third *Graham* factor was undisputed. The parties stipulated in the jury instructions
26 that the relevant level of skill consisted of an undergraduate degree in mechanical or electrical
27 engineering with certain experience. Dkt. No. 235 at 3.

28

1 On the first *Graham* factor about the scope and content of the prior art, Dr. Parnell testified
2 on behalf of JFM that Ludwig '355, Rathburn '749, and Hasegawa '612 are relevant. *See* TX 27,
3 24, 26. Johnstech agreed that Ludwig and Hasegawa are relevant, as they are disclosed in the '866
4 patent, but presented substantial evidence that Rathburn is not. Andres testified that the Rathburn
5 invention is designed to test a “ball grid array [integrated circuit] device” unlike the device that
6 the '866 patent is designed to test, which has “metal leads on the edges.” Tr. at 265. Andres
7 explained that the Rathburn invention differs from the '866 patent in a “multitude of ways.” *Id.*
8 For example, Rathburn lacks a housing, and instead of two round elastomers, Rathburn uses a
9 “thin sheet of elastomer” with “perforations” and has a “grid of contacts” instead of “rows of
10 contacts.” Tr. at 265-66. Dr. Parnell stated that in his view, Rathburn is relevant prior art because
11 “[i]t’s still a contact device for testing integrated circuits.” Tr. at 767. In sum, the jury heard
12 contested evidence on this factor, and was by no means obligated to favor JFM’s account over
13 Johnstech’s. Nothing here was contrary to the clear weight of the evidence.

14 On the second *Graham* factor, Andres testified that each of Ludwig, Rathburn, and
15 Hasegawa teach away from the method of eliminating sliding that is claimed by the '866 patent.
16 “A reference that properly teaches away can preclude a determination that the reference renders a
17 claim obvious. Whether or not a reference teaches away from a claimed invention is a question of
18 fact.” *In re Mouttet*, 686 F.3d 1322, 1333 (Fed. Cir. 2012) (internal citations omitted). On
19 Ludwig, Andres testified that the contact has a “sharp point” “meant to rock or pivot on a single
20 point on the load board,” whereas ROL and Zigma “have large radii that are on the load-board
21 pads.” Tr. at 261; *see also* TX 27. Dr. Parnell agreed that a “rocking” motion is distinct from a
22 “rolling” motion and conceded that in his expert report, he had opined that Zigma absolutely
23 would not infringe the '866 patent if the contact rocked instead of rolled. Tr. at 803-04. A finding
24 that Ludwig’s focus on rocking around a single point teaches away from the '866 patent’s method
25 of rolling along the load board would not have been against the clear weight of the evidence.

26 The same is true for Hasegawa. Andres testified that as the integrated circuit to be tested
27 “comes down, the end of the contact deforms and bends . . . [and] does not move on the printed
28 circuit board, at all,” in contrast to the rolling, rigid contact described in the '866 patent. Tr. at

1 263-67. Dr. Parnell conceded on cross that Hasegawa largely addresses “deformable contacts;
2 meaning where the contact really bends and changes shape substantially. There are a number of
3 those that are shown in Hasegawa.” Tr. at 808. Dr. Parnell identified only one figure in
4 Hasegawa “that would be a very rigid contactor, or it could be modified to be more rigid.” *Id.* A
5 finding here that Hasegawa teaches away by focusing on deformable contacts that do not move
6 along the load board again would not have been against the clear weight of the evidence.

7 For Rathburn, even if the jury believed that it might have been relevant prior art, Dr.
8 Parnell conceded during cross examination that Rathburn finds “in some circumstances, it’s
9 desirable to increase the amount of wiping [sliding] along the load board.” Tr. at 805.

10 Finally, Andres testified that, as a person of ordinary skill in the art, he knew of no reason
11 to modify or to combine Ludwig, Rathburn, Hasegawa, or any other prior art references to produce
12 the invention of the ’866 patent. *See* Tr. at 267.

13 On the fourth *Graham* factor, Johnstech presented considerable objective evidence of non-
14 obviousness. “Objective indicia of nonobviousness play a critical role in the obviousness analysis.
15 Objective indicia can be the most probative evidence of nonobviousness in the record, and
16 enables the court to avert the trap of hindsight.” *Leo Pharm. Prod., Ltd. v. Rea*, 726 F.3d 1346,
17 1358 (Fed. Cir. 2013) (internal quotations and citations omitted). Commercial success, long-felt
18 need, and copying are all objective evidence of non-obviousness, *Para-Ordnance Mfg., Inc. v.*
19 *SGS Importers Int’l, Inc.*, 73 F.3d 1085, 1087-88 (Fed. Cir. 1995), and those factors were all
20 present in Johnstech’s case. On long-felt need, Johnstech Director of Sales and Marketing Dennis
21 Wagner testified that Johnstech serves a “niche” segment in the “analog, mixed-signal, and RF
22 market,” Tr. at 357, for which “prolonged load-board life” is a desirable feature, Tr. at 365.
23 Wagner explained that load-board wear had been an issue for Johnstech customers since 1990, and
24 that Johnstech had tried but failed to offer a viable solution until Johnstech developed ROL in
25 2002. Tr. at 360-62. Andres illustrated that Johnstech’s ROL product actually practices the ’866
26 patent using video clips and physical models, Tr. at 211-22, 244. On commercial success, Wagner
27 testified that the ROL line has received a “very strong” reaction from customers who “started
28 moving over to ROL product fairly quickly,” displacing sales for Johnstech’s earlier design. Tr. at

1 365-66. Finally, on copying, Johnstech presented evidence that JFM and other third parties had
2 copied its design. Johnstech witnesses testified that a company called IDI had manufactured and
3 sold a copycat test contactor that substantially eliminates sliding. Tr. at 147, 271-72. Johnstech
4 sued IDI for patent infringement, the parties settled, and IDI pulled its test contactor off the
5 market. Tr. at 148. Johnstech's counsel also elicited on cross-examination that JFM designed or
6 marketed Zigma with Johnstech's niche market in mind. *See, e.g.*, Tr. at 650; *see also* TX 37.

7 In light of the trial record as a whole, the Court declines to depart from the jury's presumed
8 factual findings that (1) Rathburn is not relevant prior art, (2) Ludwig, Hasegawa, and Rathburn
9 teach away from the '866 invention, (3) and ROL 200's substantial elimination of sliding
10 addressed a long-felt need, experienced commercial success, and was copied by competitors.
11 Consequently, JFM has not demonstrated obviousness on clear and convincing grounds, and a new
12 trial on validity is not warranted.

13 **CONCLUSION**

14 The Court denies JFM's motion for judgment as a matter of law, or, in the alternative, a
15 new trial.

16 **IT IS SO ORDERED.**

17 Dated: June 8, 2018

18 
19
20 _____
21 JAMES DONATO
22 United States District Judge
23
24
25
26
27
28