## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

**PACT XPP SCHWEIZ AG,** 

Plaintiff,

٧.

INTEL CORPORATION,

Defendant.

Case No. 1:19-cv-01006-JDW

## **MEMORANDUM**

This patent litigation between PACT XPP Schweiz AG ("PACT") and Intel Corporation ("Intel") concerns patents for the data processing architecture in computer chips. Intel has moved for summary judgment of noninfringement, while PACT seeks summary judgment on Intel's affirmative defenses.

### I. BACKGROUND

#### A. Facts

Modern computers need to store, access, and move information and data at high speeds. Both PACT and Intel developed multi-processor computer chips that increase processing speeds and expand memory storage. The chips' efficacy depends on their internal architecture, through which they move information between, and access memory from, multiple processors and memory caches. The Parties have developed chip architecture for many years.

PACT and Intel have a long history. In relevant part, PACT met with Intel in the early 2000s to discuss PACT's multi-processor technology. There is no evidence that anyone from Intel's engineering team attended those meetings or received information from those meetings. At the time, PACT didn't hold patents to any of the relevant technology. No working relationship, partnership, or license agreement resulted from those meetings.

In 2012, PACT shared a list of its patents and patent applications with Intel and asked if Intel would like to license any of its technology. There's no evidence that Intel knew the patents in suit existed, or that PACT was prosecuting those applications. Ultimately, Intel didn't seek a license.

Intel started marketing multi-core processor technology in 2011. It is undisputed that Intel's chips execute series of instructions, which are passed along from processor to processor, and which allow the cores to access and store memory in multiple memory caches. PACT claims Intel's system infringes its patents for multi-processor systems, which claim multi-processor chips that execute sequences of data functions. This suit followed.

## B. Procedural History

On May 30, 2019, PACT filed a complaint asserting that Intel infringed 12 of its patents, including U.S. Patent No. 8,312,301 (the "'301 Patent"), U.S. Patent No. 8,471,593 (the "'593 Patent), and U.S. Patent No. 9,250,908 (the "'908 Patent"). Intel answered and asserted counterclaims on June 4, 2019. By motion and with the Court's permission, Intel Amended its answer on September 10, 2020. The Parties have participated in multiple

rounds of *inter partes review* ("IPR"), as well as appeals of those petitions to the Federal Circuit, which have invalidated a significant number of claims and patents. Litigation regarding two additional patents remains stayed pending the outcome of such proceedings. The Parties filed Motions For Summary Judgment on June 21, 2022.

Since the Parties filed their summary judgment motions, several developments have changed the scope of the case. *First*, the Federal Circuit invalidated claim 17 of the '301 Patent. *Second*, the Federal Circuit reversed the PTAB and invalidated U.S. Patent No. 9,552,047 (the "'047 Patent") and U.S. Patent No. 9,436,631 (the "'631 Patent"). *Third*, following a ruling in the Federal Circuit about the '908 Patent, PACT dismissed its claims about that patent. These developments render moot all of Intel's arguments about those patents or patent claims. It also renders moot Intel's Motion To Strike Portions Of PACT's Expert's Reports (D.I. 274), which relates to expert opinions about the '631 Patent. (It's possible, of course, that PACT will seek and obtain rehearing, rehearing *en banc*, or certiorari concerning the '047 and '631 Patents. If so, I can revisit the mootness determination.)

#### II. LEGAL STANDARD

Federal Rule of Civil Procedure 56(a) permits a party to seek, and a court to enter, summary judgment "if 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). The moving party has the initial burden of proving the absence of a genuinely

disputed material fact relative to the claims in question. *Celotex Corp. v. Catrett*, 477 U.S. 317, 330 (1986). Material facts are those "that could affect the outcome" of the proceeding, and "a dispute about a material fact is 'genuine' if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party." *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party's case. *Celotex*, 477 U.S. at 323.

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: "(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations ..., admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence ... of a genuine dispute ...." Fed. R. Civ. P. 56(c)(1).

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party's favor. *Scott v. Harris*, 550 U.S. 372, 380 (2007). A dispute is "genuine" only if the evidence is such that a reasonable jury could return a

verdict for the non-moving party. *Anderson*, 477 U.S. at 247–49. If the non-moving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. See *Celotex Corp.*, 477 U.S. at 322.

#### III. DISCUSSION

#### A. Intel's Motion

#### 1. The '301 Patent

The surviving claims of the '301 patent require "a plurality of data processing elements adapted for programmably processing sequences." ('301 Patent at 15:60-61.) During claim construction, I gave this language its plain and ordinary meaning. Later, to distinguish the '301 Patent over prior art during IPR, PACT argued that the term "sequences" is limited to data processors and does not include instruction processors. The PTAB neither adopted nor rejected that construction. Instead, the PTAB cited my construction and gave the term its plain and ordinary meaning. Intel asserts that PACT's argument before the PTAB constitutes a disclaimer of scope, meaning that Intel can't infringe because its chips only process instructions.

Statements made during IPR can constitute prosecution disclaimer. *See Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017). For this doctrine to apply, the disclaimer must be "both clear and unmistakable to one of ordinary skill in the art." *Tech. Props. Ltd. LLC v. Huawei Techs. Co.*, 849 F.3d 1349, 1357 (Fed. Cir. 2017) (citations

omitted). If the challenged statements are ambiguous or amenable to multiple reasonable interpretations, prosecution disclaimer is not established." *Id.* at 1358 (same). This rule ensures that claims aren't argued one way to maintain patentability and another against an accused infringer. *See CUPP Computing AS v. Trend Micro Inc.*, 53 F.4th 1376, 1383 (Fed. Cir, 2022). An argument made in IPR may lead to disclaimer even when the PTAB doesn't adopt it, because the statements "still inform the proper construction of the term." *Am. Piledriving Equipment, Inc. v. Geoguip, Inc.*, 637 F.3d 1324, 1336 (Fed. Cir. 2011).

During oral argument at IPR, PACT stated that the term "sequences" is limited to processing sequences of data:

Petitioner says that they can interpret this phrase in two ways, as sequences of instructions or sequences of data. Now, they claim that if you interpret this as sequences of instructions, then any processing element will read on it, but that would essentially read out the term from the phrase because the phrase is a plurality of data processing elements adopted for programmably processing sequences. If any processing element processes instructions, which any DRAM processor will do, that doesn't give any meaning to the term. You know, we focus on the sequences of data, and this is where, you know, we say that data is passed from one PE to another, the results of one PE is passed on another PE.

(D.I. 318-4 (emphasis added).) PACT later reiterated its disclaimer when it attempted to distinguish the Nicol prior art:

I wanted to respond to Petitioner Slide 37. **This is about sequences of instructions**. They point to Dr. Mangione-Smith's deposition transcript, and they say this is admissions that meets the claim language. Nothing in this passage points to the claim language. Again, this is consistent with our point that if you interpret sequences – programmably processing sequences to be

sequences of instructions, then, sure, it's a very broad term. We're not disputing the general processing elements of Nicol on due process instructions, and our expert does not dispute that. That's not saying it meets the claim language argument. We're saying, if you interpret that way, it's superfluous as far as the claim language is concerned.

(D.I. 284-12 at 5 (emphasis added).) PACT's arguments during IPR constitute a "clear and unmistakable" disclaimer of processing sequences of instructions.

PACT is wrong that its arguments can't constitute disclaimer because the PTAB rejected its proposed construction. There is unreported Federal Circuit caselaw that, because a "skilled artisan" would look to a patent's entire history to determine claim scope, arguments that the PTAB rejects can't constitute disclaimer. See Galderma Lab'ys, L.P. v. Amneal Pharms. LLC, 806 Fed. Appx. 1007, 1010-11 (Fed. Cir, 2020). But I don't have to decide if that decision is persuasive because the PTAB didn't reject PACT's construction limiting the claims to processing sequences of data. Instead, it rejected PACT's construction that "require[d] data output from one [processor] to another [processor]." (D.I. 318-5 at 3.) The two arguments are not the same. The PTAB found that no construction was necessary because the parties agreed that the plain and ordinary meaning should apply in the IPR, and because I already ruled that the plain and ordinary meaning applies. That is not a rejection of PACT's argument. See Galderma, 806 Fed. Appx. at 1011 (distinguishing American Piledriving because in Galderma there was a clear rejection of the proposed construction). Because the PTAB, standing in the Examiner's shoes as a neutral interpreter of the '301 Patent, did not reject PACT's argument that the term "sequences" is limited to data sequences, that argument informs how PTAB understood the term's plain and ordinary meaning. *See Am. Piledriving*, 637 F.3d at 1336. Therefore, prosecution disclaimer applies.

The Parties don't dispute that Intel's chips only process sequences of instructions.

Because PACT disclaimed sequences of instructions and limited its claims to data sequences, Intel's product can't infringe.

#### 2. The '593 Patent

The '593 Patent requires a "bus system [that] includes a first structure dedicated for data transfer in a first direction and a second structure dedicated for data transfer in a second direction; and each of at least some of the data processing cores includes a physically dedicated connection to at least one physically assigned one of the plurality of memory units" or a "dedicated connection to at least one assigned one of the plurality of memory units." ('593 Patent at 12:35-44, 13:42-54.) In other words, the '593 Patent incorporates two main limitations: (1) a system with two dedicated connections transferring data in different directions, and (2) processors with exclusive connections to corresponding memory units. The Parties dispute whether Intel's chips meet these limitations.

PACT claims that Intel's processors ("cores") are directly connected to physically adjacent ("co-located") memory units ("LLC slices") via bus segments in a device called a "C-Bo." There is a dispute of fact as to whether the C-Bo constitutes an access point or

acts as a combined path to the LLC slice, and whether there is a secondary bus path in the C-Bo for non-co-located cores. If the C-Bo acts only as an interface, but there are separate bus paths within it for co-located and non-co-located cores, it's possible that it infringes. But if the signals overlap in the C-Bo, then it might not infringe. The Parties have provided expert testimony and other evidence to support their positions. Therefore, a jury must hear these facts and decide infringement.

## 3. Willful infringement

Willful infringement means "deliberate or intentional" infringement. *SRI Int'l, Inc. v. Cisco Systems, Inc.*, 14 F.4th 1323, 1330 (Fed. Cir. 2021). Culpability for willful infringement "is generally measured against the knowledge of the actor at the time of the challenged conduct." *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 105 (2016). "Knowledge of the asserted patent[s] and evidence of infringement is necessary, but not sufficient, for a finding of willfulness." *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 988 (Fed. Cir. 2021). "[T]he patentee must show the accused infringer had a specific intent to infringe at the time of the challenged conduct." *Id.* at 987.

The undisputed facts in this case don't rise to the level of deliberate infringement.

PACT offers three facts for support: (1) PACT's presentations to Intel regarding its technology between 2005-2007; (2) a 2012 email from PACT to Intel containing a spreadsheet of patents and patent applications and an offer to license those patents; and (3) PACT's original complaint, which it filed in February of 2019 and then voluntarily

dismissed, all in Case No. 19-cv-00267 (the "Original Complaint"). None of these are sufficient to prevail on a willful infringement claim.

First, there's no evidence suggesting Intel knew about the existence of PACT's patents prior to February 2019, or that it knew that it was infringing those patents. PACT admits that the patents didn't exist when it presented its technology to Intel between 2005 and 2007. PACT points out that the patents in suit claim a priority date of 2005, but that's irrelevant for purposes of willful infringement because it doesn't mean that Intel had the requisite knowledge of those patents (or patent applications) at that time. Even if Intel knew about the patents once they issued, it says nothing of Intel's knowledge or intent between 2005 and the issue date. Additionally, PACT provides no evidence that Intel copied its technology based on those presentations. That's not enough to support a copying allegation.

Second, there's no evidence that Intel knew the '593 Patent existed after PACT's 2012 email, and that correspondence did not reference any of the other patents in suit. The spreadsheets that PACT attached to the email included the '593 Patent's application number, not the patent itself. The PTO often rejects patent applications, so a pending application doesn't signal Intel's knowledge that a patent existed. Additionally, Intel responded that it might be interested in licensing patents and requested more information, but PACT doesn't point to any evidence that it responded with details regarding its patents or technology.

PACT also attempts to infer Intel's state of mind regarding the 2012 email by pointing to contemporaneous internal emails on Intel's privilege logs. But none of those emails indicates that Intel knew of the '593 Patent, or that it even discussed the '593 Patent internally. The log indicates there were conversations surrounding patent analysis, which could be relevant to any of the dozens, if not hundreds, of patents referenced in the spreadsheets that PACT sent. (*See* D.I. 318-29.) It would be a logical leap, not just a reasonable inference, to assume that any of those analyses relates to the '593 Patent, and PACT is only entitled to reasonable inferences, not logical leaps, in opposing summary judgment.

Third, and finally, although the Original Complaint informed Intel of PACT's patents and infringement contentions, it doesn't create a claim for willful infringement. Other judges in this district have found that "where the defendant's alleged knowledge of the asserted patents is based solely on the content of that complaint or a prior version of the complaint filed in the same lawsuit," there is no claim for willful infringement. See, e.g., Boston Sci. Corp. v. Nevro Corp., 560 F. Supp. 3d 837, 845 (D. Del. 2021) (citation omitted). I agree with Judge Connelly's conclusion in that case. There are many reasons why a complaint can't constitute the basis willful infringement, among them that a complaint can't constitute an element of a claim that it purports to raise, and that it would mean all infringement suits involve willful infringement. See Id.; Wrinkl, Inc. v. Facebook, Inc., No. 20-cv-1345-RGA, 2021 4477022 at \*8 (D. Del. Sept. 30, 2021). It would also undermine a

defendant's ability to put forward a good faith defense.

PACT argues that because the Original Complaint is not the same complaint in this case, the logic underpinning *Boston Scientific* and *Wrinkl* doesn't apply. That argument is unpersuasive. The Complaint in this case is based on the same alleged infringement as the Original Complaint. A rule allowing a plaintiff to file a complaint, withdraw it, and then file again to take advantage of enhanced damages would create an incentive to abuse the court system and avoid settlement at the outset. Additionally, Intel could read the fact that PACT voluntarily dismissed its suit as a sign that it thought its infringement contentions were weak and that Intel wasn't infringing. As such, it undermines the deliberate and intentional state of mind required for willful infringement.

PACT also suggests that the communications it had with Intel in 2005 and 2012 can inform the willfulness inquiry when it filed and withdrew the Original Complaint in 2019. It's true that courts will look at the totality of circumstances in considering an infringer's state of mind. *See WCM Indus., Inc. v. IPS Corp.,* 721 Fed. Appx. 959, 970 (Fed. Cir. 2018) (noting willfulness analysis considers the totality of the circumstances of the case). But that doesn't help PACT here. There's no indication that pre-suit communications between PACT and Intel contributed to Intel's knowledge of the patents or the possibility that it was infringing those patents beyond what it learned once it received the Original Complaint. Even if anyone at Intel happened to remember conversations with PACT dating back 7-15 years, there's no evidence that Intel thought it was infringing PACT's patents

when it decided to defend itself rather than surrender. The totality of the circumstances don't change the analysis in this case.

### B. PACT's Motion

## 1. IPR estoppel

"The petitioner in an *inter partes review* of a claim in a patent under this chapter that results in a final written decision under section 318(a) . . . may not assert either in a civil action arising in whole or in part under section 1338 of title 28 . . . that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during the *inter partes review*." 35 U.S.C. § 315(e)(2). The words "reasonably could have raised" refer to all grounds that a petitioner could have included in an IPR petition. *See Cal. Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 991 (Fed. Cir. 2022). The raisable bases for invalidity during IPR are limited to "prior art consisting of patents or printed publications." 35 U.S.C. § 311(b). On its face, this rule exempts from IPR estoppel prior art references based on physical devices.

Although PACT asks me to disregard Intel's invalidity arguments based on physical products, it hasn't shown that any of the physical prior art references that it challenges match the printed publications that Intel raised in IPR proceedings. PACT tries to string together printed references that it claims are "cumulative" of the physical products. But PACT hasn't pointed me to any legal basis to parse Intel's legal contentions to decide whether the physical device portion is "cumulative." PACT cites several cases in which

courts applied IPR estoppel despite the inclusion of physical device prior art in a reference. But those cases are distinguishable because, in each case, the court determined there was a corresponding printed publication matching the physical device. For example, in *Wasica Fin. GmbH v. Schrader Int'l, Inc.*, 432 F. Supp. 3d 448, 454 (D. Del. 2020), Judge Stark noted that the parties didn't dispute that each the physical product references were fully disclosed in a publication, and that the only difference from the IPR proceeding was the inclusion of the physical device. Similarly, in *Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990, 1032 (E.D. Wis. 2017), the court drew a distinction between the printed materials associated with a physical specimen and the specimen itself. It allowed the latter, even if they fell within the scope of the IPR. Other cases PACT cites come to the same conclusion. *See Cal. Inst. Of Tech. v. Broadcom Ltd.*, No. CV 16-3714-GW(AGRx), 2019 WL 8192255 at \*7 (C.D. Cal. Aug. 9, 2019).

PACT asks me to "dig into the substance of [Intel's] references and determine that the physical devices do not add anything beyond the written references," but I won't. *See Microchip Tech. Inc. v. Aptiv Servs. US LLC*, No. 1:17-cv-01194, 2020 WL 4335519 at \*4 (D. Del. Jul. 28, 2020). Intel disputes whether the documents PACT cites were either available to it or include all the relevant features of the physical product, and its expert will testify that the combination of the physical and printed prior art is significant. I have no basis to disregard such testimony and those references.

## 2. Inequitable conduct

The inequitable conduct defense bars enforcement of a patent if, during the prosecution of that patent, the patentee misrepresented or omitted material information with the specific intent to deceive the Patent and Trademark Office ("PTO"). *In re Rembrandt Techs. LP Patent Litig.*, 899 F.3d 1254, 1272 (Fed. Cir. 2018) (quoting *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1285-87 (Fed. Cir. 2011) (en banc)). Intent and materiality are separate elements. *Id.* Materiality means but-for materiality. *Therasense*, 649 F.3d at 1291. "Prior art is but-for material if the PTO would have denied a claim had it known of the undisclosed prior art." *Cal. Inst. Of Tech.*, 25 F.4th at 991. (Fed. Cir. 2021). Intent to deceive must be the single most reasonable inference drawn from the evidence if there are other possible reasons for the patentee's actions. *Therasense*, 649 F.3d at 1290.

Intel points to four actions it says are grounds for inequitable conduct. The first is that PACT intentionally buried prior art references in its patent applications. Intel argues that the PTO would have denied the '593 and '908 Patents based on that prior art. There are disputes of material fact regarding the materiality of those prior art references and whether PACT intentionally buried them to deceive the PTO. For example, Intel's expert will testify that the reference was not cumulative of others provided to the PTO, and that it would have been material. Intel also cites evidence that despite the PTO's repeated objections to PACT's "voluminous" information disclosure statements containing only marginally relevant or irrelevant citations, and PACTs awareness of the importance of the

prior art in question, PACT continued to dump documents. This testimony suffices.

Therefore, I won't grant summary judgment on the inequitable conduct defense.

PACT argues that the Federal Circuit's holding in *Fiskars, Inc. v. Hung Mfg. Co.*, 221 F.3d 1318, 1327 (Fed. Cir. 2000) precludes basing an inequitable conduct defense on burying. I rejected that argument in a prior order (*See* D.I. 151 at 3 ("The Federal Circuit has recognized burying as a cognizable claim in *Molins. Molins PLC v. Textron, Inc.*, 48 F.3d 1172 (Fed. Cir. 1995). Nothing in *Fiskars* suggests the Federal Circuit overturned that precedent.").) PACT doesn't cite anything in its brief that changes my mind.

The remainder of Intel's inequitable conduct contentions are irrelevant because burying is a sufficient ground, so this defense will remain in the case. I won't parse each basis for inequitable conduct to decide how Intel may assert the defense. PACT may object to evidence of that conduct *in limine* or at a later stage of proceedings.

## 3. Marking

PACT seeks summary judgment of Intel's marking defense. The defense was relevant only to the '301 and '047 Patents. I'm granting summary judgment on the former patent, and the Federal Circuit invalidated the latter, so the Motion on this defense is moot.

# 4. Intel's Fifth, Sixth, and Seventh Affirmative Defenses, And Intel's First Counterclaim

PACT moved for summary judgment on Intel's Fifth, Sixth, and Seventh Affirmative Defenses, as well as Intel's First counterclaim. Intel doesn't contest it, so I'll grant summary

judgment.

## IV. CONCLUSION

The Court will grant summary judgment on the '301 Patent, as well as Intel's Fifth, Sixth, and Seventh Affirmative defenses, and Intel's First Counterclaim. An appropriate Order follows.

		_		 	_
$\mathbf{p}\mathbf{v}$	ты		CO	 רמ	Г-
$\mathbf{n}$		_		 ĸ	

/s/ Joshua D. Wolson	
JOSHUA D. WOLSON, J.	

March 24, 2023