

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

THE SHERWIN-WILLIAMS COMPANY,	)	CIVIL ACTION NO. 17-1023
	)	
Plaintiff/Counterclaim-defendant,	)	JUDGE JOY FLOWERS CONTI
	)	
	)	
v.	)	
	)	
PPG INDUSTRIES, INC.,	)	
	)	
Defendant/Counterclaimant.	)	

**OPINION**

I. Introduction

On June 18, 2020, the special master entered four reports and recommendations (individually a “R&R,” collectively the “R&Rs”) on Daubert and evidentiary issues (ECF Nos. 555, 556, 558 and 561).<sup>1</sup> The special master’s R&Rs were issued after extensive briefing and oral argument by video conference, which the court attended. (Transcript, ECF No. 553).

Numerous objections to the special master’s R&Rs (accompanied by more extensive briefing) are pending (ECF Nos. 572, 573, 574, 588, 589, 591, 593). The objections will be reviewed de novo and addressed seriatim. The parties have had ample notice and opportunity to be heard pursuant to Federal Rule of Civil Procedure 53(f)(1). This opinion will not address issues on which the special master requested additional input from the parties or the pending motions in limine, which will be the subject of other R&Rs from the special master.

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<sup>1</sup> The R&R at ECF No. 561 supersedes the R&R at ECF No. 557, which inadvertently identified the wrong expert.

II. Objections to the R&Rs

A. R&R # 555 –Exemplary Perez Coating

In R&R #555, the special master recommended that Sherwin’s motion in limine to exclude all evidence and expert testimony about the Exemplary Perez Coating be denied. Sherwin objects.

In its opinion and order of March 18, 2020 (ECF No. 530), the court denied Sherwin’s partial motion for summary judgment of no anticipation and concluded that there were material disputes of fact about whether the Perez Patent anticipated the Asserted Patents. The court recognized that PPG’s expert, Dr. Robson Storey (“Storey”), created a coating (the “Exemplary Perez Coating”) for the purpose of demonstrating his opinion that a coating based on the Perez Patent would inherently meet the testing limitations of the Asserted Patents.

The special master noted that Sherwin did not challenge Storey’s qualifications and that its own expert had also created an exemplary coating based on Perez. The special master concluded that there was a battle of the experts about what the Perez Patent taught a person of ordinary skill in the art (“POSITA”) that should be resolved by the jury.

The court agrees with the reasoning and recommendation of the special master. In *Hospira v. Fresenius Kabi USA*, 946 F. 3d 1322 (Fed. Cir. 2020), the court emphasized that the “inherent teaching of a prior art reference is a question of fact.” *Id.* at 1329. The court explained that “extrinsic evidence can be used to demonstrate what is ‘necessarily present’ in a prior art embodiment even if the extrinsic evidence is not itself prior art.” *Id.* In other words, information obtained after the priority date, such as the Exemplary Perez Coating, can be used to show that a coating based on Perez would inherently meet the testing limitations. *Id.* The court in *Hospira* noted that unclaimed manufacturing variables “do not, as a matter of law, preclude a finding of inherency.” *Id.* at 1330.

Sherwin's reliance on *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331 (Fed. Cir. 2009), for the proposition that the Exemplary Perez Coating is inadmissible because it is not a recreation of a single prior art reference, is misplaced. Unlike the situation in *Callaway*, in which the expert "'neither prepared nor tested the balls,' and hence could not actually vouch for the reliability of the test results," *id.* at 1341, the Exemplary Perez Coating was created by Storey and is supported by his expert testimony that it reflects the teaching of the Perez Patent.<sup>2</sup> *Callaway* does not mandate the exclusion of the Exemplary Perez Coating in this case.

Sherwin will have the opportunity to cross-examine Storey, present its own expert opinion about the teachings of the Perez Patent, and introduce its own exemplary coating. It is the province of the jury, not the court, to determine which expert is more credible and to resolve the fact questions related to the inherent characteristics of a coating based on the Perez Patent.

R&R #555 will be adopted as the decision of the court, as supplemented herein.

**B. R&R #556 (Iezzi)**

The special master's R&R #556 addressed several aspects of PPG's motion to exclude certain opinions of Sherwin's expert, Dr. Robert Iezzi ("Iezzi"). The special master recommended that: (1) Iezzi could not refer to U.S. Patent No. 7,858,162, U.S. Patent No. 8,927,652, or U.S. Patent No. 7,475,786, which were not prior art of the Asserted Patents and involved "acrylics" rather than "acrylic latexes"; (2) Iezzi could testify about U.S. Patent No. 7,745,508 ("the '508 Patent"), which is prior art, to show that as of the priority date, acrylic coatings were not considered by a POSITA to be usable as inside spray coatings for food or beverage cans; and (3) Iezzi could opine about what a POSITA would have understood the term

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<sup>2</sup> The court in *Callaway* also upheld the district court's exclusion of the test ball evidence at trial. That decision, however, was based on Rule of Evidence 403 "in the context of the obviousness trial" and the appeals court held deferentially that exclusion of the evidence was not an abuse of discretion. *Id.* at 1342.

“suitable for” use as a spray-applied interior-can coating to mean. Both parties filed partial objections.<sup>3</sup>

The court agrees with the analysis and recommendations of the special master. The three later-filed patents are not relevant to the knowledge of a POSITA on the priority date of the Asserted Patents and any potential relevance is substantially outweighed by the danger of unfair prejudice, misleading the jury and confusion of the issues between the general term “acrylics” and the more specific term “acrylic latexes.” Fed. R. Evid. 403. Iezzi will not be permitted to testify about those three patents.

The fourth patent, the ‘508 Patent, is potentially relevant to the knowledge and understanding of a POSITA on the priority date. Because the ‘508 Patent is part of the prior art, the Rule 403 balancing test yields a different result. *Coleman v. Home Depot, Inc.*, 306 F.3d 1333, 1343–44 (3d Cir. 2002) (noting the “strong presumption that relevant evidence should be admitted” and that exclusion under Rule 403 requires the probative value of evidence to be “substantially outweighed” by the problems in admitting it). Iezzi will be permitted to testify concerning what a POSITA would have understood about the ‘508 patent (as opposed to PPG’s subjective knowledge). *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1242 (Fed. Cir. 2010) (relevant inquiry is what a hypothetical POSITA would have gleaned from the prior art references at the time that the patent applications were filed). In *Wyers*, the court explained that an accused infringer’s patent application “should be treated no differently than a patent application by a third party.” *Id.* PPG will have the opportunity to cross-examine Iezzi and introduce its own expert testimony about what a POSITA would have known from the prior art,

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<sup>3</sup> The special master requested additional briefing from the parties about whether Iezzi should be precluded from offering at trial any opinions regarding PPG’s alleged copying of Example 7 from U.S. Patent No. 7,592,047 (the “‘047 Patent”) because of the covenant not to sue granted by Sherwin. This topic is addressed in special master R&R #632, which will not be considered in this opinion.

including differences between acrylics and acrylic latexes.

Iezzi will be permitted to testify about what a POSITA would have understood the term “suitable for” use as a spray-applied interior-can coating to mean. In its Markman opinion, the court concluded that the term should be given its plain and ordinary meaning, but incorporates certain base-line requirements -- a coating (1) “capable of high-speed application to the substrate”; (2) “safe for food contact”; (3) having “excellent adhesion”; and (4) able to “resist degradation” (ECF No. 279 at 13). The court agreed with Sherwin that performance tests are known in the art and are tools that a POSITA can use to assess the properties of a coating, but do not directly define the criteria of the term “suitable for.” Id. at 14.

PPG will offer expert opinions that the Perez Patent discloses a product suitable for use as a spray-applied interior-can coating. Sherwin is entitled to rebut that testimony with its own expert opinions. Both sides are applying the court’s claim construction to the facts of this case. For example, Storey will opine that the teaching in Perez (curing at 325°F for one minute and at 400°F for one minute) discloses “high-speed application.” Iezzi may opine in rebuttal that a POSITA would not have understood a two-minute cure time to constitute high speed application. The experts have similar disagreements about whether Perez discloses “excellent adhesion” and what constitute acceptable testing results. These are classic “battles of the experts.” It is the jury’s role to weigh the testimony and resolve these issues.

R&R #556 will be adopted as the decision of the court, as supplemented herein.

C. R&R #558 (Dr. Schork)

The special master's R&R #558 addressed two aspects of PPG's motion to exclude certain rebuttal opinions of Sherwin's expert, Dr. F. Joseph Schork ("Schork"), about: (1) the '222 Patent Application; and (2) the monomer range.<sup>4</sup> Both sides filed partial objections.

The special master recommended that Schork be precluded from testifying about U.S. Patent Application No. 13/939,222 ("the '222 Patent Application"), entitled "Coating Composition with Improved Adhesion to Containers." Sherwin seeks to use comments<sup>5</sup> made in the application to rebut Storey's testimony that organic solution polymerization versus polymerization in water is simply a design choice. The special master concluded that statements in the '222 Application and prosecution, which were made in 2015-2016 and involved references not at issue in this case, were irrelevant to a POSITA's knowledge as of the priority dates of the Asserted Patents, were irrelevant to an obviousness analysis, and would confuse the jury.

The special master recommended that Schork be permitted to testify about whether the monomer range disclosed in the Perez Patent touches or renders obvious the range disclosed in the Asserted Patents. Specifically, the Perez Patent discloses use of oxirane-group containing monomers in amounts of 0 to 5% by weight, preferably 0.5 to 2%. Claim 26 of the '900 Patent contains a limitation of "more than 5 wt-% to 30 wt-% oxirane-group containing monomers." The Exemplary Perez Coating had 6% oxirane-group containing monomers. Storey will opine, in essence, that use of a higher range would have been obvious to a POSITA. Schork would rebut that opinion, contending that Perez teaches away from a range above 5% by expressing a preferred range up to 2%. The special master explained: "PPG is free to use its experts to argue

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<sup>4</sup> The R&R deferred decision on the issue of whether Sherwin is bound by its admission to the USPTO that the Perez Patent discloses a BPA-free coating, pending further briefing.

<sup>5</sup> Sherwin also seeks to introduce an omission, i.e., that PPG did not cite the Perez Patent as prior art in applying for the '222 Patent.

that the Perez Patent discloses the relevant ranges of a monomer or renders it obvious, while Schork is free to rebut that expert's opinion." (ECF No. 558 at 11). The court agrees with the special master's analysis and recommendations.

1. '222 Patent Application

In this technically complex case, it will be important during the validity phase of trial to focus the jury's attention on the objective knowledge of a POSITA based on the applicable prior art on the priority date of the Asserted Patents. *Genetics Inst., LLC v. Novartis Vaccines & Diagnostics, Inc.*, 655 F.3d 1291, 1307 (Fed. Cir. 2011) (the obviousness analysis remains properly focused on the time the invention was made). References by Schork to the prosecution of the '222 Patent, which is not part of the prior art, are not relevant to the issues in this case and therefore do not "fit." PPG would likely try to rebut the proffered opinions by explaining why the '222 Patent Application is different and why the Perez Patent is not prior art to that technology. In short, a side litigation about the '222 Patent Application would ensue. These opinions would confuse the issues and distract the jury about an entirely different patent application process. These opinions of Schork are therefore inadmissible under Rules 401, 403 and 702.

The decision in *Genetics* is not to the contrary. Sherwin relies on the court's comment that "it would be error to prohibit a patent applicant or patentee from presenting relevant indicia of nonobviousness, whether or not this evidence was available or expressly contemplated at the filing of the patent application." *Id.* at 1307. At issue in *Genetics*, however, was evidence of unexpected results of the claimed invention, i.e., the ability of an acidic region of a blood-clotting protein to bind to another important protein. *Id.* at 1294, 1307. In this case, Sherwin is not seeking to introduce evidence that the Asserted Patents have unexpected benefits beyond those disclosed in the Perez Patent, which renders the Asserted Patents nonobvious. Instead, the

post-dated evidence Sherwin seeks to introduce through Schork relates to comments made (or omitted) by PPG in the prosecution of an entirely different patent application. The court agrees with the special master that the challenged evidence does not relate to secondary considerations of nonobviousness about the Asserted Patents.

## 2. The monomer range

By contrast, testimony by Schork about what the Perez Patent teaches (and specifically, about whether the Perez Patent discloses the relevant monomer range claimed in the ‘900 Patent), is entirely appropriate. Both sides cite decisions that rely on *In re Peterson*, 315 F.3d 1325 (Fed. Cir. 2003). See *In re Brandt*, 886 F.3d 1171, 1177 (Fed. Cir. 2018) (“obviousness exists when the claimed range and the prior art range do not overlap but are close enough such that one skilled in the art would have expected them to have the same properties”) (quoting *In re Peterson*, 315 F.3d at 1329); *Valeant Pharm. Int’l, Inc. v. Mylan Pharm. Inc.*, 955 F.3d 25, 33 (Fed. Cir. 2020) (patent holder may rebut invalidity case by, among other ways, showing that the prior art teaches away from the claimed invention) (citing *In re Peterson*, 315 F.3d at 1331)).

In *In re Peterson*, which involved a *prima facie* case for obviousness at the patent and trademark office,<sup>6</sup> the court identified various “range” scenarios. Obviousness “typically exists” when the ranges claimed in a patent overlap the ranges disclosed in the prior art. *Peterson*, 315 F.3d at 1329. A claimed invention could also be rendered obvious by a prior art reference whose range abuts the claimed range. *Id.* (discussing *In re Woodruff*, 919 F.2d 1575, 1578 (Fed. Cir. 1990) (disclosed range of about 1–5% carbon monoxide abutted the claimed range of more than 5% to about 25% carbon monoxide)). In addition, “a *prima facie* case of obviousness exists when the claimed range and the prior art range do not overlap but are close enough such that one

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<sup>6</sup> A patent applicant may overcome a *prima facie* case of obviousness by establishing that the range is critical or achieves unexpected results, or that the prior art teaches away from the claimed invention in any material respect. *Id.* at 1330-31.



skilled in the art would have expected them to have the same properties.” Id.

The monomer ranges at issue in this case abut or are close. There are, however, material disputes of fact about what a POSITA would have expected from the prior art. Id. at 1328 (“whether a reference teaches away from a claimed invention are questions of fact.”). Storey will opine that the monomer range in the Asserted Patents was rendered obvious to a POSITA by the Perez Patent and U.S. Patent No. 4,647,612 (“Ranka”). In paragraphs 241-247 of his rebuttal report, Schork explains why he disagrees, from the perspective of a POSITA. Sherwin will be permitted to offer Schork’s testify in rebuttal to Storey’s opinion about the same topic.

In sum, R&R #558 will be adopted as the decision of the court, as supplemented herein.

D. R&R #561 (Damages – Kearn and Milani)

Both Sherwin and PPG filed Daubert motions criticizing the methodology employed by the opposing party’s damages experts, Dr. James Kearn (“Kearn”) and Michael J. Milani (“Milani”). In R&R #561, the special master recommended that the Daubert motions be generally denied and that the experts be subjected to vigorous cross-examination at trial.<sup>7</sup> Both parties objected to R&R #561. Sherwin objects to the recommendations to: (1) allow Milani’s reasonable royalty opinions; and (2) exclude Kearn’s conveyed sales opinions. PPG objects to denial of its motion on Kearn’s opinions about: (1) a reasonable royalty analysis; (2) qualification of Sherwin’s products at Coke; and (3) price erosion.

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<sup>7</sup> At page 13 of the Corrected R&R, the special master agreed that that Kearn should not be permitted to testify about issues that were determined by the court’s summary judgment opinion (i.e., references to an Akzo-Nobel BPA-NI product and the nature and scope of the covenant not to sue). In its objections, Sherwin agrees that Kearn should not be permitted to testify about those topics, but seeks to also preclude testimony from Dr. Milani on those topics. As the special master informed the parties, this relief was not presented by a motion and will be the subject of a future R&R, if necessary.

1. Reasonable royalty

The special master explained that in opining about a reasonable royalty, both damages experts purported to apply the fifteen “Georgia Pacific factors.” *Georgia–Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The special master rejected Sherwin’s arguments that Milani’s methodology was insufficiently detailed and that he simply used a Nash Bargaining Solution (i.e., assumed that incremental profits would be split 50/50). The special master rejected PPG’s arguments that Kearl’s analysis was a disguised lost profits opinion and that he failed to apportion royalties to reflect other valuable aspects of PPG’s product, Innovel HPS (“Innovel”).

The court generally agrees with the special master. The “reasonable royalty” calculation necessarily involves some imprecision because it is determined by constructing a hypothetical negotiation. *Lucent Tech., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324–25 (Fed. Cir. 2009). There may be multiple acceptable methodologies. *Id.* As the special master explained, both experts purported to apply the Georgia Pacific factors and the jury should determine which expert’s application of those factors is more persuasive.

The court disagrees with the special master on one issue. Sherwin is correct that a damages expert must provide a specific economic analysis to support an opinion that reasonable royalties should be apportioned to reflect nonpatented characteristics of a multi-factor product. PPG seeks to offer opinion testimony by Milani on Georgia Pacific factor 13 that the profits attributable to the Asserted Patents would be conservatively 50% based on the value of non-patented features of Innovel, such as a high glass transition temperature and performance characteristics such as scalping, flavor, resistance and application. Milani Report at 79-80. Milani did not perform a quantitative analysis to determine that the high glass temperature or other factors constituted 50% of the market value of the product. See Milani Deposition at 219-

21. Based on the record, it appears to be an arbitrary figure. In *Koninklijke Philips Elecs. N.V. v. Zoll Lifecor Corp.*, No. CV 12-1369, 2017 WL 3140798, at \*4 (W.D. Pa. July 25, 2017), the court excluded a similar “apportionment of benefits” opinion, where the damages expert was unable to articulate any precise basis for the 50% reduction during his deposition and it appeared to be entirely subjective. In *Koninklijke*, the court rejected the damages expert’s attempt to rely on an undocumented conversation with a technical expert. *Id.* at \*4 n.5. See *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 69 (Fed. Cir. 2012) (excluding apportionment of benefits opinion where expert’s apportionment was not based on a credible economic analysis). The same analysis applies here. Milani’s opinion about the allocation of benefits is supported only by an undocumented conversation with Storey and Milani did not conduct a sufficient economic analysis about the benefits of the various features of Innoval to support a 50% allocation. PPG would be inviting the jury to speculate about the value of the nonpatented features. See *Guardant Health, Inc. v. Found. Med., Inc.*, No. CV 17-1616-LPS-CJB, 2020 WL 2461551, at \*19 (D. Del. May 7, 2020) (because damages expert provided no concrete tie to the specific 50% allocation value, the opinions lacked a sufficiently reliable methodology). The error cannot be remedied by opining that the allocation is conservative. *Id.* at \*18 (“merely labelling a value ‘conservative’ is no substitute for a showing that there is an evidentiary foundation for the particular percentage selected”). Milani will not be permitted to testify that profits should be apportioned to reflect the value of nonpatented features of Innoval, such as a high glass transition temperature. This aspect of R&R #561 will not be adopted.

To be clear, the exclusion of the “apportionment of benefits” testimony does not apply to the alternative bases for Milani’s reasonable royalty opinion – namely, that Sherwin’s patent did not provide any economic benefit over the disclosures of the Perez Patent, and that the value of both PPG’s and Sherwin’s products was driven by the Prop 65 regulation. Milani Report at 79-

80. These opinions are not directly challenged by Sherwin (ECF No. 604 at 3-8) and are supported by the record. If the court reaches the damages phase, the jury will have necessarily rejected PPG's position that the Perez Patent renders the Asserted Patents invalid. The jury can nevertheless consider Milani's opinions about the existence of the Perez Patent and Prop 65 as factors in the hypothetical negotiation of a reasonable royalty.

## 2. Convoyed Sales

The special master recommended that Kearl be precluded from testifying about "convoyed sales" because Kearl failed to establish a factual nexus for convoyed sales (such as tying or inducement). Sherwin did not initially object to the special master's recommendation (ECF No. 604), but did raise the issue in response to PPG's objections (ECF No. 619).

The court agrees with special master. Kearl testified in his deposition that his convoyed sales opinion was based on the general premise "that getting your foot in the door leads to your ability to sell additional stuff." (Kearl Deposition at 236-37, ECF No. 391-3, filed under seal). Kearl cited documents showing PPG's willingness to discount Innovel, but was unable to identify any specific products constituting convoyed sales. Kearl explained that the difficulty in quantifying convoyed sales was a reason to award injunctive relief. *Id.* at 236-40. Injunctive relief will be an issue for the court, not the jury. Presenting information about unquantified convoyed sales during the trial would improperly invite the jury to speculate about damages.

## 3. Coke qualification

PPG argued that Kearl should not be permitted to speculate that an indictment of a Coke employee might have been responsible for performance problems of Sherwin's product at that facility (ECF No. 391 at 16, filed under seal). PPG did not contest Kearl's ability to testify, if a proper foundation is laid, that he assumed Coke would qualify Sherwin's product. *Id.* Sherwin's response (ECF No. 468 at 17) did not reference the indicted employee, but focused on Kearl's

ability to rely on testimony from Sherwin employees that Sherwin would have been able to overcome an “off-flavor” issue and qualify its product at Coke. The special master resolved this issue in one sentence, noting that Milani will also testify about qualification of competing products at Coke. (ECF No. 561 at 13).

This does not appear to be a real dispute. Neither damages expert will be permitted to testify about the indictment of the Coke employee, per Rule 403. Both experts, however, will be permitted to explain the basis for their respective assumptions about whether Sherwin’s product would be qualified at Coke.

#### 4. Price erosion

PPG argued that Kearn failed to perform a credible economic analysis to support a price erosion opinion as part of his lost profits analysis after Innovel entered the market. The special master concluded that PPG’s objections (i.e., competition from epoxy sprays, changes in raw material costs) went to weight, rather than admissibility. The special master observed that Milani will offer rebuttal testimony to Kearn’s price erosion opinions.

PPG did not articulate any specific objection to the special master’s analysis. The special master recognized that Kearn defined a two-player market, from which it could be inferred that Sherwin would have charged higher prices but for Innovel. PPG’s reliance on *Crystal Semiconductor Corp. v. TriTech Microelectronics Int’l, Inc.*, 246 F.3d 1336, 1358 (Fed. Cir. 2001), in which the party “faced great price competition from many other [ ] manufacturers besides the alleged infringers,” is therefore misplaced. The court perceives no error in the special master’s recommendation.

In sum, R&R #561 will be adopted in part, as modified and supplemented herein.

### III. Conclusion

In accordance with the foregoing, special master R&Rs # 555, 556 and 558 will be adopted as the opinions of the court as modified and supplemented herein. Special master R&R # 561 will be adopted in part as the opinion of the court as modified and supplemented herein, and will be rejected with respect to Milani's "allocation of benefits" testimony, which will be inadmissible.

An appropriate order follows.

/s/ Joy Flowers Conti  
Joy Flowers Conti  
Senior United States District Judge

Dated: August 27, 2020