No.

IN THE
Supreme Court of the United States

MERCK & CO., INC., MERCK SHARP & DOHME CORP., AND IONIS PHARMACEUTICALS, INC.,
Petitioners,

v.

GILEAD SCIENCES, INC.,
Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether the equitable defense of unclean hands precludes legal relief in the form of damages.

PARTIES TO THE PROCEEDINGS BELOW

Petitioners Merck & Co., Inc., Merck Sharp & Dohme Corp., and Isis Pharmaceuticals, Inc. (now known as Ionis Pharmaceuticals, Inc.) were defendants/counter-claimants in the district court and appellants/cross-appellees in the court of appeals.

Respondent Gilead Sciences, Inc., was plaintiff/counter-defendant in the district court and appellee/cross-appellant in the court of appeals.

CORPORATE DISCLOSURE STATEMENT

Pursuant to this Court's Rule 29.6, petitioner Merck & Co., Inc., states that it has no parent corporation and that no publicly held company owns 10% or more of its stock. Merck & Co., Inc., is the parent corporation and owns 10% or more of the stock of petitioner Merck Sharp & Dohme Corp. Petitioner Isis Pharmaceuticals, Inc. (now known as Ionis Pharmaceuticals, Inc.) further states that it has no parent corporation and that no publicly held company owns 10% or more of its stock.

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Merck & Co., Inc., Merck Sharp & Dohme Corp., and Ionis Pharmaceuticals, Inc. (f/k/a Isis Pharmaceuticals, Inc.), respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit in these cases.

OPINIONS BELOW

The court of appeals' opinion in *Merck & Co.* v. *Gilead Sciences, Inc.*, Nos. 2016-2302, 2016-2615 (App., *infra*, 1a-31a), is reported at 888 F.3d 1231. The court of appeals' opinion in *Merck & Co.* v. *Gilead Sciences, Inc.*, No. 2018-

1017 (App., *infra*, 122a-123a), is unreported.[1] The district court's orders (App., *infra*, 32a-121a, 124a-159a) are unreported.

STATEMENT OF JURISDICTION

The court of appeals entered judgment in Nos. 2016-2302, 2016-2615 (App., *infra*, 1a-31a) on April 25, 2018, and in No. 2018-1017 (App., *infra*, 122a-123a) on July 6, 2018. On July 12, 2018, the Chief Justice extended the time to file a petition for a writ of certiorari in Nos. 2016-2302, 2016-2615 to September 21, 2018. This Court has jurisdiction under 28 U.S.C. § 1254(1).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

Relevant provisions of the Patent Act of 1952, 35 U.S.C. §§ 1 *et seq.*, and the Seventh Amendment to the U.S. Constitution are set forth in the Appendix (App., *infra*, 160a-161a).

PRELIMINARY STATEMENT

This case presents a fundamental question regarding the doctrine of unclean hands: Can that *equitable defense* be asserted to bar *legal claims* for damages? For centuries, the answer has been "no." Unclean hands could preclude equitable relief, but provided no basis to refuse legal rights. "If judges had the power to deny damages and other legal remedies because a plaintiff came into court with unclean hands, citizens would not

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[1] The cases present "closely related questions" for which "a single petition for a writ of certiorari" is permissible under this Court's Rule 12.4. The first appeal (Nos. 2016-2302, 2016-2615) upheld the district court's unclean-hands ruling. The second appeal (No. 2018-1017) upheld the attorneys' fees that the district court awarded as a result of the unclean-hands ruling.

have rights, only privileges." 1 D. Dobbs, *Law of Remedies* §2.4(2), at 94 (2d ed. 1993). In *Manufacturers' Finance Co.* v. *McKey*, 294 U.S. 442 (1935), this Court rejected the unclean-hands defense as "inapplicable" in damages actions. *Id.* at 451. The plaintiff's legal rights were not "subject to denial or curtailment in virtue of equitable principles applicable only against one who affirmatively has sought equitable relief." *Id.* at 453.

The Federal Circuit has gone the opposite direction. Citing the Federal Rules of Civil Procedure's 1938 merger of procedures for law and equity and the 1952 Patent Act, the Federal Circuit allows the equitable defense of unclean hands to bar legal actions for patent infringement. Thus, in the decision below, the Federal Circuit held that unclean hands could nullify a jury's $200 million damages award. That mistaken expansion of unclean hands beyond its equitable origins has profound impacts. And it reflects disarray on the issue throughout federal courts.

STATEMENT

I. LEGAL FRAMEWORK

A. The Equitable Defense of Unclean Hands

This case concerns the scope of the "maxim" that "'[h]e who comes into equity must come with clean hands.'" 1 J. Pomeroy, *Equity Jurisprudence* §397, at 432-433 (1886). The "unclean hands" doctrine originated centuries ago in the English chancery and exchequer courts that provided equitable relief. Z. Chafee, Jr., *Coming into Equity with Clean Hands*, 47 Mich. L. Rev. 877, 880-882 (1949). Richard Francis, *Maxims of Equity* 5-8 (1st ed. 1728), thus reported the maxim 290 years ago: "He that hath committed Iniquity, shall not have Equity."

The "clean hands" label first appeared in *Dering* v. *Winchelsea* (1787) 29 Eng. Rep. 1184 (Exch.). "[A] man must come into a Court of Equity," the Court of the Exchequer declared, "with clean hands." *Id.* at 1185. In so doing, it rejected the argument that relief can be barred based on any "depravity." *Ibid.* Instead, the misconduct must have an "immediate and necessary relation to the equity sued for." *Ibid.* That condition would be satisfied, for example, if a plaintiff who had "bored a hole" in a ship—making him "the author of the loss"—sought contribution for goods thrown overboard in an effort to keep the ship afloat. *Ibid.* By contrast, no "immediate and necessary relation" would exist where the alleged wrongdoing did not contribute to the alleged loss. *Ibid.*

Unclean hands is "one of the elementary and fundamental conceptions of equity jurisprudence." 1 Pomeroy, *supra*, § 398, at 433; see 1 J. Story, *Equity Jurisprudence* § 98, at 98 (14th ed. 1918). It ensures the court's equitable powers are not used to help "a person to reap the benefits of his own misconduct." *Restatement (Second) of Torts* § 940 cmt. c (1979); see also *Kitchen* v. *Rayburn*, 86 U.S. (19 Wall.) 254, 263 (1874) (unclean hands precludes plaintiffs from using "a court of equity to derive an advantage from their own wrong"); *Bein* v. *Heath*, 47 U.S. (6 How.) 228, 247 (1848) (similar).

This Court applied unclean hands in three 20th-century patent cases—*Keystone Driller Co.* v. *General Excavator Co.*, 290 U.S. 240 (1933), *Hazel-Atlas Glass Co.* v. *Hartford-Empire Co.*, 322 U.S. 238 (1944), and *Precision Instrument Manufacturing Co.* v. *Automotive Maintenance Machinery Co.*, 324 U.S. 806 (1945). In *Keystone*, the Court explained that "courts of equity * * * apply the maxim requiring clean hands * * * where some

unconscionable act of one coming for relief has immediate and necessary relation to the equity that he seeks in respect of the matter in litigation." 290 U.S. at 245. In *Hazel-Atlas*, the Court refused the plaintiff the equitable remedies of an injunction and accounting where the plaintiff had obtained its patent "by fraud." 322 U.S. at 241, 251. And in *Precision Instrument*, the Court held that the patentee's unclean hands barred its "suit in equity." 324 U.S. at 815, 819.

B. The Law-Equity Distinction

"Unclean hands" thus has its origins in equity. The law-equity distinction traces to the 14th century, when English courts were divided into "common-law" courts and "chancery" courts. See T. Main, *Traditional Equity and Contemporary Procedure*, 78 Wash. L. Rev. 429, 440-443 (2003). While common-law courts could "award[ ] damages," they could not "compel the performance of any duty." E. Merwin, *The Principles of Equity and Equity Pleading* 17 (1895). The different courts also had different decision-makers—cases were tried to juries in courts of law, but to the chancellor in courts of equity. See P. Devlin, *Jury Trial of Complex Cases: English Practice at the Time of the Seventh Amendment*, 80 Colum. L. Rev. 43, 57-59 (1980). The "two utterly different systems" seldom interacted. *Id.* at 59.

This Nation inherited that system. "By the Constitution of the United States, and by the acts of Congress organizing the Federal courts, * * * the distinction between common-law and equity jurisdiction [was] explicitly declared and carefully defined and established." *Fenn* v. *Holme*, 62 U.S. (21 How.) 481, 484 (1859).

In 1934, the Rules Enabling Act, Pub. L. No. 73-415, ch. 651, 48 Stat. 1064 (1934), authorized limited changes. The Act did not merely permit this Court to promulgate

the Federal Rules of Civil Procedure. See *id.* §1, 48 Stat. at 1064. It also authorized the Court to "unite the general *rules* * * * for cases in equity with those in actions at law so as to secure one *form of civil action* and *procedure* for both." *Id.* §2, 48 Stat. at 1064 (emphasis added). This Court promulgated the Federal Rules of Civil Procedure in 1938. "[I]n lieu of discretely labeled actions at law and suits in equity," *Baker* v. *Gen. Motors Corp.*, 522 U.S. 222, 235 (1998), Rule 2 provided that "[t]here shall be one form of action to be known as 'civil action,'" Fed. R. Civ. P. 2 (1938). "Notwithstanding the [procedural] fusion of law and equity by the Rules of Civil Procedure, the substantive principles of Courts of Chancery remain[ed] unaffected." *Stainback* v. *Mo Hock Ke Lok Po*, 336 U.S. 368, 382 n.26 (1949).

C. The 1952 Patent Act

Under the 1952 Patent Act, "unenforceability" is a "defense[]" to patent infringement. 35 U.S.C. §282(b)(1). The Federal Circuit has interpreted "unenforceability" to include "'equitable defenses such as laches, estoppel and unclean hands.'" *J.P. Stevens & Co.* v. *Lex Tex Ltd.*, 747 F.2d 1553, 1561 (Fed. Cir. 1984); see also *A.C. Aukerman Co.* v. *R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1029 (Fed. Cir. 1992) (en banc), abrogated in part, *SCA Hygiene Prods. Aktiebolag* v. *First Quality Baby Prods.*, 137 S. Ct. 954 (2017).

The Federal Circuit recognizes that unclean hands is an "'equitable defense[].'" *J.P. Stevens*, 747 F.2d at 1561. Yet it holds that the defense is "available to bar legal relief, including patent damage actions." *Aukerman*, 960 F.2d at 1031; see, *e.g.*, *Aptix Corp.* v. *Quickturn Design Sys., Inc.*, 269 F.3d 1369, 1371-1372 (Fed. Cir. 2001); *Consol. Aluminum Corp.* v. *Foseco Int'l Ltd.*, 910 F.2d 804, 809-812 (Fed. Cir. 1990). Addressing laches, however,

this Court has explained that the 1952 Act does not make equitable defenses applicable to "*all* patent infringement claims, including claims for damages." *SCA Hygiene*, 137 S. Ct. at 962-963 (emphasis added).

II. The Patents At Issue

This case arises from two patents held by petitioner Merck—U.S. Patent Nos. 7,105,499 ("the '499 patent") and 8,481,712 ("the '712 patent")—for a pioneering invention that has proved instrumental in curing millions of individuals suffering from the life-threatening effects of the hepatitis C virus ("HCV").

A. Merck Invents and Patents a Revolutionary Class of Compounds for Treating Hepatitis C

Approximately 200 million people worldwide are infected with HCV. C.A. App. 152 (1:29-38). In 1998, Merck partnered with Isis (now Ionis) Pharmaceuticals (collectively "Merck") to revolutionize HCV treatment. App., *infra*, 4a.

HCV reproduces by using nucleosides in the body—the "building blocks" of DNA and RNA—to assemble strands of its own genetic code. C.A. App. 6772, 6774. Merck scientists recognized that, by altering the structure of a naturally occurring nucleoside, it might be possible to make "chain terminators" that stop HCV replication. *Id.* at 20291 (951:15)-20293 (956:25); see App., *infra*, 4a. After years of testing, Merck had discovered over 50 compounds that inhibited HCV replication. App., *infra*, 42a; C.A. App. 20305 (1005:8-23).

Having "discovered an important class of molecules," Merck "felt it was important to * * * protect that invention." C.A. App. 20297 (973:15-23). Dr. Philippe Durette, a Merck employee, handled patent prosecution. App., *infra*, 4a, 41a-43a. Starting in 2001, Merck filed patent

applications disclosing and claiming a class of nucleoside analogs and their use to treat HCV. *Ibid.*

Two applications filed in January 2002 eventually led to the '499 and '712 patents at issue in this case. App., *infra*, 5a. The applications' shared specification disclosed general chemical formulas and included over 150 example compounds. *Id.* at 4a-5a, 42a. The representative compounds had anti-HCV activity considered "quite impressive" in 2002. C.A. App. 217 (132:56-57), 218 (133:22-23), 20479 (1316:13-25).

B. Pharmasset Attempts To License Merck a Compound Covered by Merck's Patents

A company called Pharmasset, later acquired by Gilead, was also working on anti-HCV compounds. Interactions between Pharmasset and Merck—in particular, a 2004 due-diligence call—became central to the decisions below.

When Merck's patent applications published in 2002, Pharmasset had not made any active anti-HCV compounds. See App., *infra*, 8a-9a. After reviewing Merck's applications, Pharmasset's Jeremy Clark proposed making a compound now known as PSI-6130. *Id.* at 9a. PSI-6130 falls within the class of compounds claimed in Merck's patent applications. See C.A. App. 20214 (824:7-22), 20218 (841:3-21). Pharmasset made and tested PSI-6130 by May 2003. App., *infra*, 9a. It proved highly active against HCV. See C.A. App. 19948 (389:23)-19949 (390:14), 27088-27089.

In 2004, Pharmasset approached Merck about partnering to develop PSI-6130 as a "clinical candidate." C.A. App. 32369; see *id.* at 20500 (1402:5-24). In the associated non-disclosure agreements, Merck agreed not to use Pharmasset's "Confidential Information" except to eval-

uate the potential collaboration. *Id.* at 32153 (¶¶ 5-6); App., *infra*, 17a, 43a-44a. The NDA included a carve-out, providing that "Confidential Information shall not * * * include information which" lawfully "becomes part of the public domain." C.A. App. 32152 (¶ 3(ii)).

Pharmasset proposed to reveal PSI-6130 to Merck during a March 2004 due-diligence call. App., *infra*, 18a. Durette—the patent prosecutor responsible for the application that became the '499 patent—participated in the call. *Ibid.* During the call, the parties confirmed that a "firewall" covered the conversation. *Ibid.* When Pharmasset disclosed a compound similar to PSI-6130, Durette interjected that "[i]t's a problem" because it "'seems quite related to things that I'm involved with.'" C.A. App. 31545. Pharmasset "described" PSI-6130 nonetheless. *Ibid.* After the call, Durette removed himself from further discussions with Pharmasset. App., *infra*, 19a.

Recognizing PSI-6130 was covered in its own patent application, Merck discontinued negotiations. C.A. App. 32188. "Merck stepped down" because they "weren't very happy" that Pharmasset was attempting to "licens[e] a compound that [Merck] already had in their stable." *Id.* at 20341 (1151:11)-20342 (1152:1).

Pharmasset filed the "Clark" patent application in May 2003, and it published in January 2005. App., *infra*, 9a, 53a. The publication disclosed—and thus made public—compounds including PSI-6130. PSI-6130 and a broad range of the disclosed compounds fell within the genus of compounds already claimed in Merck's patent applications.

C. Merck's Patents Are Amended and Then Issue

Between the March 2004 due-diligence call and the publication of the Clark application, Durette took no ac-

tion on Merck's '499 patent application. As Durette testified, when Pharmasset publicly disclosed PSI-6130 in the Clark application, all "obligations under the [Pharmasset] confidentiality agreement terminated immediately." C.A. App. 19949 (390:18-19); see pp. 8-9, *supra*. Soon thereafter, Durette amended Merck's '499 application to *narrow* its claims to focus on a smaller class of compounds that encompassed the Clark compounds. App., *infra*, 20a, 53a.[2] The '499 patent ultimately issued in September 2006. C.A. App. 150.

In February 2007, Durette filed another application that ultimately issued as the '712 patent (its ancestor was one of Merck's January 2002 applications). App., *infra*, 5a, 11a, 68a. The claims of that application, as filed by Durette, did not cover PSI-6130. *Id.* at 11a; C.A. App. 24150-24152. He had no further involvement in the '712 patent's prosecution; he retired in 2010. C.A. App. 19954 (413:18-21).

Later, Pharmasset published information on its anti-HCV compound, "sofosbuvir," and its metabolites, which were based on PSI-6130. App., *infra*, 9a. In 2011, Jeffrey Bergman—who had taken over prosecuting Merck's '712 application—amended the application to add claims covering the disclosed sofosbuvir metabolites. C.A. App. 24394-24410, 32386 (56:19)-32387 (59:01). Bergman had no connection to the 2004 Merck-Pharmasset due diligence. See *id.* at 31544-31545; App., *infra*, 112a. The '712 patent issued in July 2013. C.A. App. 223.

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[2] It is not "in any manner improper" for a patent applicant to amend claims in a previously filed application to cover a competitor's product, if the original application describes the subject matter of the later amendment. *Kingsdown Med. Consultants, Ltd.* v. *Hollister Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988).

III. PROCEEDINGS BELOW

A. Proceedings Before the District Court

After acquiring Pharmasset, Gilead obtained FDA approval of its sofosbuvir products, Sovaldi® and Harvoni®, for treating HCV. App., *infra*, 2a, 33a. Before launching its products, Gilead sought declaratory judgments of non-infringement and invalidity of Merck's '499 and '712 patents. *Id.* at 2a. Merck counterclaimed for infringement. *Ibid.*; C.A. App. 952. Gilead eventually stipulated that Sovaldi® and Harvoni® infringe, but challenged the validity of Merck's patents and asserted equitable defenses. App., *infra*, 2a-3a, 13a.

1. *After a Trial, the Jury Awards Merck $200 Million for Infringement*

An 11-day jury trial was held in March 2016. Gilead's defense turned largely on its contention that Merck had derived its claimed inventions from Pharmasset. Durette, Gilead urged, had amended the claims of Merck's '499 patent using confidential Pharmasset information obtained during the 2004 due-diligence call, including the structure of PSI-6130. Gilead emphasized the fact that, in his deposition, Durette denied being on that call, even though the record made clear that he had participated. See C.A. App. 19937-19939, 20660-20662.[3]

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[3] At his deposition, Durette provided inconsistent answers about participating in the 2004 call 11 years earlier. Initially, Durette stated that he did not "recall" participating. See C.A. App. 22336 (19:1-3). Gilead's counsel circled back, and Durette stated he could not have been on the call. See *id.* at 22339 (30:21-31:10). Durette later returned to his original answer—pressed on whether he had not been on the call or simply did not remember, he testified that he did not "recall," and thus "both possibilities are possible." *Id.* at 22374 (172:15-23), 22380 (194:14-15).

Durette testified at trial that he had come to understand that he must have been on the call, C.A. App. 19937 (343:17-25), 19938 (347:9-22); he was mistaken when he stated, at his deposition, that he "did not participate in the Pharmasset due diligence," *id.* at 19937 (343:13-344:17). Gilead questioned and purported to impeach Durette extensively at trial. See, *e.g.*, *id.* at 19583, 19937-19939, 19942.

Durette also testified that he took no action on the '499 application between the 2004 call and the Clark application's publication in 2005. C.A. App. 19944 (370:4-11), 28318-28321. Durette stated that, when Clark published, any "obligations under the confidentiality agreement had terminated." *Id.* at 19944 (370:13-14). Durette testified that he amended the '499 application at that time because he felt he would "get an expedition of the examination" if he "narrowed the claim." *Id.* at 19945 (376:12-18).

Merck agreed that Durette "was on a phone call with Pharmasset in which the structure of 6130 was described." C.A. App. 19895 (178:5-7). But Merck argued that "[wa]s irrelevant." *Id.* at 19895 (177:7-13); see also *id.* at 15804-15810; 20676-20677. If the claimed invention was described and enabled when the original patent application was filed in 2002, Merck's claims had priority from that date, and later events like the 2004 call could not change that. *Id.* at 15804-15810; see *Frazer* v. *Schlegel*, 498 F.3d 1283, 1287 (Fed. Cir. 2007). If Merck had not described and enabled the claimed invention in the 2002 application, the claims would be invalid for those reasons, rendering Gilead's derivation defense superfluous.

By the close of evidence, the district court agreed that Gilead's derivation defense was superfluous. It instructed the jury: "If you find that Merck's patent application

as filed described and enabled an asserted claim" of the patents in 2002, "you must also find that the claim is not invalid for derivation [or] * * * prior invention." C.A. App. 19833-19834.

The jury found Merck's patent claims not invalid and awarded Merck $200 million for infringement. App., *infra*, 34a; C.A. App. 21066-21075.

2. *The District Court Overturns the Jury Verdict After a Bench Trial on Equitable Defenses*

The district court then held a bench trial on Gilead's equitable defenses, including unclean hands. App., *infra*, 3a, 34a. Gilead's unclean-hands defense again rested on its theory that Merck "obtain[ed] its patent[ ] rights by deriving the invention from Pharmasset's confidential disclosures" during the 2004 call (even though the jury had found Merck possessed its invention by 2002). C.A. App. 15735. Relying largely on the testimony it presented to the jury, Gilead urged that Durette's participation in the 2004 call, his amendments to the '499 patent, and his allegedly "false testimony" on those issues were so "unconscionable" as to "bar enforcement of the patents-in-suit." *Id.* at 20987, 21957, 21961-21969.

The district court acknowledged that "unclean hands applies only where the 'unconscionable act of one coming for relief has immediate and necessary relation to the equity that he seeks.'" App., *infra*, 83a (quoting *Keystone*, 290 U.S. at 245). But it ruled that the "misconduct does not have to be material"—it need only "relate to" the matter in suit. *Id.* at 112a. Applying that standard, the court invoked "business" and "litigation" misconduct to foreclose enforcement of the '499 patent. *Id.* at 90a, 94a.

The "business misconduct" consisted of Durette "learning the confidential structure of Pharmasset compound PSI-6130 and pursuing patent claims to cover that compound in violation of the Merck-Pharmasset firewall." App., *infra*, 90a. The court did not address the fact that the claims of Merck's '499 patent application *already* covered PSI-6130 (and sofosbuvir) before the 2004 call and the 2005 amendment. Nor did it acknowledge that the information regarding PSI-6130 was publicly disclosed in the Clark application and no longer "confidential" under the non-disclosure agreement when Durette amended the '499 patent's claims.

The district court described the "litigation misconduct" as Durette's "inconsistent, contradictory, and untruthful testimony." App., *infra*, 94a. The court considered it "[r]emarkabl[e]" that, at trial, Durette "recanted" his deposition testimony by acknowledging that he must have participated in the 2004 due-diligence call. *Id.* at 94a-95a. The court disbelieved Durette's testimony that he had amended the '499 patent's claims in 2005 to expedite prosecution of the patent. *Id.* at 66a. And the court asserted that Merck made Durette "a centerpiece" of its case. *Id.* at 100a. But it did not mention that Merck urged the jury to *ignore* Durette's testimony as irrelevant, while *Gilead* called Durette to testify during its own case and invoked Durette repeatedly during argument. See Merck C.A. Br. 26, 48-49, 57-58.

As for the '712 patent, the court disavowed reliance on "improper business conduct" by Durette because a different Merck employee with no connection to the 2004 call had amended the '712 application to cover sofosbuvir. App., *infra*, 113a n.5. Instead, the court declared that "litigation misconduct casts a darkness on this entire case that covers both patents-in-suit." *Id.* at 113a. The '712

patent must be unenforceable, the court stated, because "it would be an odd result * * * if Merck could engage in * * * substantial litigation misconduct * * * yet face no penalty because the '712 Patent was deemed uncontaminated." *Ibid.*

The district court overturned the jury's $200 million verdict for Merck and awarded Gilead attorneys' fees. App., *infra*, 3a, 124a-159a.

B. Proceedings Before the Federal Circuit

The Federal Circuit affirmed. App., *infra*, 1a-31a. It rejected Merck's argument that the district court had erred by refusing to require "'material[ity].'" *Id.* at 14a-15a. Applying the "immediate and necessary relation" standard, the Federal Circuit "[did] not find a sufficient basis to set aside the district court's determination of unclean hands under the applicable deferential [abuse-of-discretion] standard of review." *Id.* at 16a.

The Federal Circuit made clear, however, that its "decision rests only on the totality of the evidence-supported misconduct" it "summarize[ed]" in its opinion, and not on "every finding of the district court." App., *infra*, 16a; see, *e.g.*, *id.* at 21a n.5 (finding no violation of the NDA, disagreeing with district court). With respect to the '499 patent, the court concluded that Durette's conduct had an "immediate and necessary relation to the equity of the patent-enforcement relief Merck seeks in this litigation." *Id.* at 28a. It considered the '712 patent a "closer" case, but found "no abuse of discretion" in the district court's "conclusion that the unclean hands defense extends to that patent as well." *Id.* at 29a.

Having affirmed the unclean-hands finding, the Federal Circuit later affirmed the district court's award of attorneys' fees on the same basis. App., *infra*, 122a-123a.

REASONS FOR GRANTING THE PETITION

This case presents an important and recurring issue in patent law and other contexts—whether the *equitable* defense of unclean hands can preclude *legal* relief. Unclean hands has long been an equitable defense that can be asserted only against equitable claims. But it has no role in damages cases tried to juries. This Court has honored that traditional approach, refusing to allow unclean hands to bar legal relief. Courts can "apply the maxim requiring clean hands *only* where some unconscionable act of one coming for relief has [an] immediate and necessary relation *to the equity* that he seeks in respect of the matter in litigation." *Keystone Driller Co.* v. *Gen. Excavator Co.*, 290 U.S. 240, 245 (1933) (emphasis added). *Legal* rights are not "subject to denial or curtailment in virtue of equitable principles applicable only against one who affirmatively has sought equitable relief." *Mfrs.' Fin. Co.* v. *McKey*, 294 U.S. 442, 451, 453 (1935).

In the patent context, however, the Federal Circuit and district courts employ unclean hands to bar legal relief such as damages. In this case, the district court and Federal Circuit invoked that equitable doctrine to nullify a jury's damages verdict. Outside the patent context, three circuits have taken the opposite view: They agree that unclean hands should not be applied to bar claims for legal relief. But two other circuits agree with the Federal Circuit's expansion of the doctrine.

Allowing unclean hands to bar legal relief does not merely defy tradition and precedent. It creates serious Seventh Amendment problems. Here, for example, the district court's theory of business misconduct—that Merck stole the ideas in its patents from Pharmasset—was the same theory that Gilead presented to the jury to challenge patent validity. The jury rejected Gilead's

story, finding that Merck was entitled to $200 million in damages for Gilead's infringement. But the district court decided the jury's verdict should not be honored based on its view of essentially the same evidence under a different doctrine. That intrudes gravely on the values the Seventh Amendment protects. Review is warranted.

I. The Federal Circuit's Approach Disregards This Court's Precedent And Historical Practice

This Court has long honored the substantive distinction between law and equity, refusing to allow equitable defenses like unclean hands to bar legal relief. The Federal Circuit has adopted the opposite approach.

A. This Court Has Long Held That Unclean Hands Applies Only to Equitable Claims

This Court has scrupulously enforced the substantive distinction between law and equity. As the Court observed 130 years ago: "In the courts of the United States, to legal actions legal defences only can be interposed." *N. Pac. R.R.* v. *Paine*, 119 U.S. 561, 563 (1887); *Lantry* v. *Wallace*, 182 U.S. 536, 549-550 (1901) ("[I]n actions at law * * * equitable defences are not permitted."). That rule is a matter of substance. "[T]he jurisprudence of the United States has always recognized the distinction between law and equity" as a "matter of substance, as well as of form and procedure." *Scott* v. *Armstrong*, 146 U.S. 499, 512 (1892).

Thus, even for matters before courts of equity, this Court has rejected efforts to interpose unclean hands to defeat legal claims. In *Manufacturers' Finance Co.* v. *McKey*, 294 U.S. 442 (1935), for example, the plaintiff brought a suit in equity seeking legal relief—the balance due on a contract for purchase of accounts receivable. *Id.* at 445-446. The lower court denied relief on the ground

that the plaintiff "had not come into equity with clean hands." *Id.* at 446. The contract terms, the court declared, were "'so manifestly harsh and oppressive as to shock the conscience.'" *Id.* at 448.

This Court reversed. 294 U.S. at 449-450. Although the plaintiff had brought the suit in equity, it "did not seek equitable relief," but "an enforcement of its legal rights." *Id.* at 449. "'Legal rights are as safe in chancery as they are in a court of law,'" this Court explained, "'and however strong an appeal may be to the conscience of a chancellor for equitable relief, he is powerless to grant it if the one from whom it must come will be deprived of a legal right.'" *Ibid.* The lower court's judgment, this Court concluded, "rest[ed] wholly on the untenable assumption that petitioner's *rights* are subject to denial or curtailment in virtue of *equitable principles applicable only against one who affirmatively has sought equitable relief*; and here that was not the case." *Id.* at 453 (emphasis added). The "maxim that 'he who comes into equity must come with clean hands,' which the District Court invoked and made the basis of its decision," was simply "inapplicable." *Id.* at 451.

This Court's precedents thus reflect the "orthodox view of the unclean hands doctrine"—that it is "an equitable defense * * * that can be raised to defeat an equitable remedy," while "leaving the plaintiff full access to her legal remedies." 1 D. Dobbs, *Law of Remedies* § 2.4(2), at 93 (2d ed. 1993); see 1 J. Story, *Equity Jurisprudence* § 98, at 98 (14th ed. 1918) (describing unclean hands as "one of the fundamental principles" of "equity jurisprudence"); *Bein* v. *Heath*, 47 U.S. (6 How.) 228, 247 (1848) (describing unclean hands as "a principle in chancery"). As the Court recognized more recently, the "application of [an] equitable defense * * * in an action at law would

be novel indeed." *County of Oneida* v. *Oneida Indian Nation of N.Y. State*, 470 U.S. 226, 244 n.16 (1985).

Consistent with that, this Court has refused to allow the equitable defense of laches to bar legal relief in copyright and patent actions. *Petrella* v. *Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1974 (2014) (copyright); *SCA Hygiene Prods. Aktiebolag* v. *First Quality Baby Prods., LLC*, 137 S. Ct. 954, 959 (2017) (patents). Those decisions partly rest on the existence of "a statute of limitations enacted by Congress." *Petrella*, 134 S. Ct. at 1974. But they also reflect a basic premise: Because "laches is a defense developed by courts of equity," its "principal application was, and remains, to claims of an equitable cast." *Id.* at 1973-1974; see *SCA Hygiene*, 137 S. Ct. at 960-961 (discussing "traditional role of laches in equity"). The same is true of unclean hands.

B. Entrenched Federal Circuit Precedent Departs from This Court's Decisions and Historical Tradition

The Federal Circuit has ignored those precedents. Merck sought and was awarded damages, see C.A. App. 952—the "'classic form of *legal* relief.'" *Great-W. Life & Annuity Ins. Co.* v. *Knudson*, 534 U.S. 204, 210 (2002). Yet the courts below denied Merck that relief based on the "untenable assumption" that its legal patent rights can be foreclosed based on "equitable principles" like unclean hands. *Mfrs.' Fin.*, 294 U.S. at 453.

As Merck urged below, "unclean hands 'does not grant courts free-floating authority to deny' legal rights as punishment." Merck C.A. Br. 38. Applying the defense is "particularly inappropriate" when it requires courts to convert that "*equitable* doctrine * * * to bar a *legal* claim for damages." *Id.* at 45 (first emphasis added). "Invoking unclean hands to refuse 'damages and other legal

remedies' raises the prospect that 'citizens would not have rights, only privileges.' That 'goes too far.'" *Id.* at 45-46 (quoting 1 Dobbs, *supra*, § 2.4(2), at 94, 99).

The Federal Circuit, however, went that "far" below, invalidating a jury's damages award based on the equitable defense of unclean hands. And it has done so repeatedly in the past. See, *e.g.*, *Aptix Corp.* v. *Quickturn Design Sys., Inc.*, 269 F.3d 1369, 1371-1372 (Fed. Cir. 2001); *Consol. Aluminum Corp.* v. *Foseco Int'l Ltd.*, 910 F.2d 804, 809-812 (Fed. Cir. 1990). The Federal Circuit's (and its predecessor's) practice of invoking equity to bar both legal and equitable relief, without distinction, traces back almost half a century. In 1970, the Federal Circuit's predecessor created a doctrine called "inequitable conduct" to address misconduct before the Patent and Trademark Office. *Norton* v. *Curtiss*, 433 F.2d 779, 793-794 (C.C.P.A. 1970). That patent-specific doctrine "evolved" from an interpretation of this Court's "unclean hands cases." *Therasense, Inc.* v. *Becton, Dickinson & Co.*, 649 F.3d 1276, 1287 (Fed. Cir. 2011) (en banc). Because patent applicants have "a relationship of trust" with the PTO when seeking patents, the court of appeals reasoned, it was appropriate to "expan[d] * * * the types of misconduct for which applicants will be penalized." *Norton*, 433 F.3d at 793-794; see, *e.g.*, *Ferring B.V.* v. *Barr Labs., Inc.*, 437 F.3d 1181 (Fed. Cir. 2006); *Agfa Corp.* v. *Creo Prods. Inc.*, 451 F.3d 1366 (Fed. Cir. 2006). Where inequitable conduct is found, the patents at issue are rendered unenforceable—even for damages claims.

See *J.P. Stevens & Co.* v. *Lex Tex Ltd.*, 747 F.2d 1553, 1560-1562 (Fed. Cir. 1984).[4]

To justify expanding the equitable "unclean-hands" defense to defeat legal claims for damages, the Federal Circuit invoked the 1938 Rules of Federal Procedure—and Rule 2's creation of a single cause of action for legal and equitable claims. See J. Cross, *The* Erie *Doctrine in Equity*, 60 La. L. Rev. 173, 222-223 & n.262 (1999); see also *A.C. Aukerman Co.* v. *R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1031 (Fed. Cir. 1992) (en banc), abrogated in part, *SCA Hygiene Prods. Aktiebolag* v. *First Quality Baby Prods.*, 137 S. Ct. 954 (2017) (overturning the Federal Circuit's application of laches to bar legal relief under the Patent Act); *Accuscan, Inc.* v. *Xerox Corp.*, No. 96 Civ. 2579, 1998 WL 273074, at *2 (S.D.N.Y. May 27, 1998) (citing *Aukerman*). As explained below, that is mistaken. The Federal Rules merged the forms of action as a procedural matter; they did not substantively expand equitable defenses like unclean hands into barriers to legal relief. See pp. 24-25, *infra*. The Federal Circuit's contrary position warrants review.

II. The Courts Are Divided On This Important And Recurring Issue

For decades, courts have disagreed on whether the equitable unclean-hands defense can bar legal relief.

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[4] In *Therasense*, the Federal Circuit sought to reform inequitable conduct, which had "'become an absolute plague,'" compelling "'[r]eputable lawyers * * * to make the charge against other reputable lawyers.'" 649 F.3d at 1289. This Court has not addressed the now-separate inequitable-conduct doctrine.

A. The Courts of Appeals Disagree on Whether Unclean Hands May Bar Damages Claims

1. At least three circuits agree that, because unclean hands is an *equitable* defense, it should not be applied to defeat *legal* relief. The Third Circuit has noted that, "[u]nder [the unclean-hands] doctrine, a party will not be able to obtain equitable relief if he himself has engaged in misconduct." *Tarasi* v. *Pittsburgh Nat'l Bank*, 555 F.2d 1152, 1156 n.9 (3d Cir. 1977). Consequently, where plaintiffs "only seek" legal relief—*i.e.*, "damages"—"the 'unclean hands' doctrine is not relevant." *Id.* at 1157 n.9; see also *McAdam* v. *Dean Witter Reynolds, Inc.*, 896 F.2d 750, 756 n.10 (3d Cir. 1990) ("Since McAdam in this appeal only seeks damages, the unclean hands doctrine is not applicable.").

The Second Circuit has likewise recognized that "the clean hands doctrine" is not "applicable" to damages actions, because it applies only to "a suit in equity." *Conn. Importing Co.* v. *Frankfort Distilleries*, 101 F.2d 79, 81 (2d Cir. 1939). And the Eleventh Circuit has rejected the "misguided effort to import into a case at law the equitable doctrine of 'unclean hands.'" *Coats & Clark, Inc.* v. *Gay*, 755 F.2d 1506, 1511 (11th Cir. 1985).

2. Like the Federal Circuit, the Fourth Circuit has adopted the opposite position. In *Tempo Music, Inc.* v. *Myers*, 407 F.2d 503 (4th Cir. 1969), the complaint for copyright infringement "sought both injunctive relief and damages at law." *Id.* at 507 n.8. The Fourth Circuit explained that, "insofar as [the suit] seeks an injunction, [it] is equitable in nature," and "unclean hands will be invoked to bar recovery." *Ibid.* Conversely, "[w]here only damages are sought, an infringement suit is brought at law." *Ibid.* Yet the court disregarded that distinction: Under the "equitable doctrine of 'unclean hands,'" the

court held, plaintiffs were "estopped" from "assert[ing] infringement and ask[ing] for damages." *Id.* at 507.

The Seventh Circuit has endorsed the view that the "equitable defense" of unclean hands may bar claims for "common law damages." *Byron* v. *Clay*, 867 F.2d 1049, 1052 (7th Cir. 1989). And other courts have applied unclean hands to bar legal relief as well. The Ninth Circuit has held that "[t]he defense of unclean hands * * * prevents the copyright owner from asserting infringement and asking for damages when the infringement occurred by his dereliction of duty." *Supermarket of Homes, Inc.* v. *San Fernando Valley Bd. of Realtors*, 786 F.2d 1400, 1408 (9th Cir. 1986).

B. Other Courts Are in Disarray

The remaining courts are in disarray. At least one court of appeals has cases pointing both directions.[5] And district courts repeatedly confront this issue—and repeatedly disagree.

Some apply unclean hands to bar legal relief. See, *e.g.*, *F.E.L. Publ'ns, Ltd.* v. *Catholic Bishop of Chi.*, 506 F. Supp. 1127, 1138 (N.D. Ill. 1981), rev'd on other grounds, No. 81-1333, 1982 WL 19198 (7th Cir. Mar. 25, 1982);

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[5] In *Kuehnert* v. *Texstar Corp.*, 412 F.2d 700 (5th Cir. 1969), the Fifth Circuit held that, although the plaintiff in a federal securities lawsuit was "not seeking equitable relief," unclean hands "remains applicable, since it expresses a general principle equally suited to damage actions." *Id.* at 704. In *Mitchell Bros. Film Group* v. *Cinema Adult Theater*, 604 F.2d 852 (5th Cir. 1979), the Fifth Circuit deemed the issue unresolved. The court observed that "unclean hands is equitable in nature" and thus "would seemingly not bar recovery of damages for copyright infringement." *Id.* at 865 n.26. The court did "not resolve this issue" because it found "unclean hands should not be available" in that "particular case." *Ibid.*

Testa v. *Janssen*, 492 F. Supp. 198, 201 (W.D. Pa. 1980). Others refuse to apply unclean hands to legal claims because it is an "equitable defense[ ]." *Providence Health Plan* v. *Charriere*, 666 F. Supp. 2d 1169, 1182 (D. Or. 2009); see also *Garcel, Inc.* v. *Hibernia Nat'l Bank*, No. Civ. A. 01-772, 2002 WL 356307, at *3 (E.D. La. Mar. 5, 2002) ("the defense of 'unclean hands' is applicable only to actions for equitable relief").

That widespread disagreement underscores the issue's recurring nature and the importance of review. The content of federal law, and the ability to enforce legal rights, should not vary with the happenstance of the court with jurisdiction.

III. The Federal Circuit's Approach Is Wrong—And Implicates Separation-Of-Powers Issues

The Federal Circuit's rationale for extending the equitable defense of unclean hands to legal relief is wrong. It also implicates critical separation-of-powers concerns.

A. The Substantive Distinction Between Equitable and Legal Defenses Has Not Been Abolished

1. To justify interposing "equitable defenses" in cases "at law," the Federal Circuit has invoked the Federal Rules of Civil Procedure, "which merged legal and equitable claims into a single civil action." *Auker-man*, 960 F.2d at 1031. That merger, the Federal Circuit holds, makes equitable defenses "available to bar legal relief, including patent damage actions." *Ibid.*

That impermissibly reads the adoption of the Federal Rules as changing substantive law. Congress authorized the promulgation of the Federal Rules in the Rules Enabling Act, Pub. L. No. 73-415, ch. 651, 48 Stat. 1064 (1934). But that authority had limits: The rules pre-

scribed by the Court could *not* "abridge, enlarge, [ ]or modify the substantive rights of any litigant." *Id.* §1, 48 Stat. at 1064. The rules could address "matters of pleading and court practice and procedure," but not "substantive law." *Sibbach* v. *Wilson & Co.*, 312 U.S. 1, 10, 14 (1941). The "distinction between law and equity" is a "*matter of substance*, as well as of form and procedure." *Scott*, 146 U.S. at 512 (emphasis added). The scope of a defense in particular is a matter of "substance," not "procedure." See *Shady Grove Orthopedic Assocs., P.A.* v. *Allstate Ins. Co.*, 559 U.S. 393, 407-408 (2010).

The Rules Enabling Act thus did not give this Court authority to expand the scope of equitable defenses, and this Court took no such action. Rule 2 merged law and equity to create a single form of action, a "civil action," but that procedural change "[did] not abolish the distinction between law and equity" as a substantive matter. *Coca-Cola Co.* v. *Dixi-Cola Labs.*, 155 F.2d 59, 63 (4th Cir. 1946); see *Stainback* v. *Mo Hock Ke Lok Po*, 336 U.S. 368, 382 n.26 (1949) ("substantive principles * * * remain[ed] unaffected"); *Grupo Mexicano de Desarrollo, S.A.* v. *All. Bond Fund, Inc.*, 527 U.S. 308, 322 (1999) ("merger did not alter substantive rights"). Federal courts remain constrained to "apply equitable principles to equitable rights and legal principles to legal rights." *Sun Oil Co.* v. *Burford*, 130 F.2d 10, 17 (5th Cir. 1942), rev'd on other grounds, 319 U.S. 315 (1943). The "'substantive and remedial principles [applicable] prior to * * * the federal rules [have] not changed.'" *Petrella*, 134 S. Ct. at 1974 (brackets in original). The Federal Circuit's view that the Federal Rules expanded the scope of equitable defenses is itself sufficient grounds for this Court's review.

2. In *Aukerman*, the Federal Circuit also invoked a 1915 statute, 38 Stat. 956, to support expanding equitable defenses to legal claims. That provision, eventually superseded by Rule 2, had allowed parties "to plead equitable defenses at law without having to resort to a separate bill in equity." 960 F.2d at 1031. But the Federal Circuit misread the scope of the statute. Traditionally, a party seeking to *enjoin* a legal proceeding had to file a separate bill in a court of equity. See, *e.g.*, *Kessler* v. *Eldred*, 206 U.S. 285, 286 (1907). The 1915 statute eliminated the need to file a separate equitable action. But any "equitable issue raised" was still to "be disposed of *as in a court of equity*." *Liberty Oil Co.* v. *Condon Nat'l Bank*, 260 U.S. 235, 242 (1922) (emphasis added). "What was an action at law before the [1915 statute] [was] still an action founded on legal principles; and what was a bill in equity before the [statute] [was] still a civil action founded on principles of equity." *Ibid.* (quotation marks omitted). We have found no case, before or after the 1915 statute, in which a court of equity invoked the equitable defense of unclean hands to enjoin a legal proceeding.

To the contrary, soon after the 1915 statute was enacted, this Court made clear that unclean hands could not be asserted to bar legal claims, even where those claims are asserted in courts of equity. The action in *Manufacturers' Finance*, discussed above (at 17-18), was filed in a court of equity. But this Court still rejected an unclean-hands defense because the plaintiff "did not seek equitable relief" but rather "enforcement of its legal rights." 294 U.S. at 449. "'Legal rights are as safe in chancery as they are in a court of law'"; equitable defenses cannot be employed if the plaintiff "'will be

deprived of a legal right.'" *Ibid.* The Federal Circuit's view of the 1915 statute defies *Manufacturers' Finance*.

3. *Aukerman* also invoked 35 U.S.C. §282. See 960 F.2d at 1029. Section 282 states that "unenforceability" "shall be [a] defense[] in any action involving the validity or infringement of a patent." 35 U.S.C. §282(b)(1). But this Court has already rejected, in the context of laches, the proposition that §282 made *all* equitable defenses applicable to "*all* patent infringement claims, including claims for damages." *SCA Hygiene*, 137 S. Ct. at 962-963 (emphasis added). Unclean hands should be no different. Moreover, when §282 was enacted in the Patent Act of 1952, the courts considered unclean hands only in patent cases seeking equitable relief. See, *e.g.*, *Buono* v. *Yankee Maid Dress Corp.*, 77 F.2d 274, 275, 278 (2d Cir. 1935) (analyzing "the doctrine of 'unclean hands'" in "the usual bill in equity for the infringement of two patents"); *Bell & Howell Co.* v. *Bliss*, 262 F. 131, 135 (7th Cir. 1919) (reversing grant of injunction in a suit in equity based on unclean hands).

Indeed, the traditional rule—repeatedly articulated by this Court—is that unclean hands is a defense only to equitable relief. Where a "'principle is well established, . . . courts may take it as given that Congress has legislated with an expectation that the principle will apply except when a statutory purpose to the contrary is evident.'" *Impression Prods., Inc.* v. *Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1536 (2017). There is no evidence that, by enacting §282, Congress intended to expand unclean hands beyond traditional boundaries.

The Federal Circuit's expansion of unclean-hands doctrine to preclude legal relief is "disturbing." 1 Dobbs, *supra*, §2.4(2), at 94. It means that citizens no longer have legal "rights," but instead "only privileges" judges

may deny based on their assessments of the equities. *Ibid.* At no time did Congress authorize that radical revision to the enforcement of property rights. The Federal Circuit erred in adopting it.

B. The Federal Circuit Has Long Misconstrued This Court's Precedents

In applying unclean hands to overturn the jury's damages award here, the Federal Circuit invoked this Court's opinions in *Keystone* and *Precision Instrument*. App., *infra*, 14a, 31a. Neither case authorizes that result. Nor does *Hazel-Atlas*, the last of the 20th-century trio of unclean-hands cases.

Keystone makes clear that unclean hands applies *only* to a plaintiff seeking equitable relief. It explained that the "words and the reasons" for "the maxim, He who *comes into equity* must come with clean hands," apply "to the party *seeking relief in equity*." 290 U.S. at 241, 244 (emphasis added). Courts thus "apply the maxim requiring clean hands *only* where some unconscionable act of one coming for relief has immediate and necessary relation to the *equity that he seeks* in respect of the matter in litigation." *Id.* at 245 (emphasis added).

To extend that maxim beyond equitable relief, the Federal Circuit had to rewrite it. Unclean hands, the court declared, applies to misconduct that has "an immediate and necessary relation to the equity *of the patent-enforcement relief*" being sought. App., *infra*, 28a. But neither the unclean-hands maxim, nor this Court's holding, extends the doctrine to all forms of "patent-enforcement relief." Instead, it is limited to parties "seeking relief in equity" where it sufficiently relates to "the equity that he seeks."

In *Keystone*, moreover, the Sixth Circuit had dismissed the plaintiff's equitable complaint "without prejudice to the prosecution of suits at law." *Gen. Excavator Co.* v. *Keystone Driller Co.*, 62 F.2d 48, 51 (6th Cir. 1932). This Court affirmed that judgment. 290 U.S. at 247. *Keystone* cannot be read as extending the equitable doctrine of unclean hands to preclude legal relief.

Precision Instrument was to the same effect. That case arose as an infringement "suit in equity," apparently for injunctive relief. 324 U.S. at 815, 819.[6] And *Hazel-Atlas* refused the equitable remedies of an injunction and accounting where the plaintiff had obtained its patent "by fraud." 322 U.S. at 241, 251. Each of those cases applied unclean hands to bar equitable relief. Yet the Federal Circuit has taken them as authority for extending that equitable defense to legal relief. See *Therasense*, 649 F.3d at 1285.

Unlike the plaintiffs in *Keystone*, *Hazel-Atlas*, and *Precision Instrument*, Merck seeks to enforce its legal rights. See C.A. App. 952. It received a damages verdict from a jury on account of those rights. The equitable unclean-hands doctrine is wholly "inapplicable," *Mfrs.' Fin.*, 294 U.S. at 451, and cannot justify overturning that verdict. Review is warranted.

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[6] While *Precision Instrument* is not pellucid about the relief sought, commentators and courts agree the plaintiff was seeking an injunction. See Z. Chafee, Jr., *Coming into Equity with Clean Hands*, 47 Mich. L. Rev. 1065, 1075 (1949); *Register.com, Inc.* v. *Verio, Inc.*, 356 F.3d 393, 436 (2d Cir. 2004).

IV. Superimposing Equitable Defenses On Legal Claims Implicates Serious Seventh Amendment Concerns

The issue does not merely implicate "archaic distinctions" of a bygone era. *Scheiber* v. *Dolby Labs., Inc.*, 293 F.3d 1014, 1022 (7th Cir. 2002). It raises serious constitutional concerns.

A. Invoking Equity To Overturn Jury Verdicts Threatens Seventh Amendment Values

The Seventh Amendment "right of jury trial in civil cases" is "fundamental" to our judicial system. *Jacob* v. *New York City*, 315 U.S. 752, 752-753 (1942). Having endured "encroachment on civil jury trial by colonial administrators," *Chauffeurs, Teamsters & Helpers, Local No. 391* v. *Terry*, 494 U.S. 558, 580 (1990) (Brennan, J., concurring), the Framers adopted the Seventh Amendment as a "bulwark" against the "whim of the sovereign" and even "the judiciary," *Parklane Hosiery Co.* v. *Shore*, 439 U.S. 322, 343 (1979) (Rehnquist, J., dissenting). That "sacred" right is "jealously guarded." *Jacob*, 315 U.S. at 752-753.

This Court has strived to protect Seventh Amendment rights against encroachment by "equity." For example, the Court has held that judges should not resolve equitable claims before juries decide legal ones where the judge's findings might be preclusive. The "right to a jury trial of legal issues" should not be "lost through prior determination of equitable claims." *Beacon Theatres, Inc.* v. *Westover*, 359 U.S. 500, 511 (1959). Thus, where an action involves "legal and equitable claims" with common issues, courts must conduct a jury trial (if demanded) on "any legal issues" before "final court determination of [the] equitable claims." *Dairy Queen, Inc.* v. *Wood*, 369 U.S. 469, 472-473, 479 (1962). The "right to

jury trial on the legal claims * * * must not be infringed either by trying the legal issues as incidental to the equitable ones or by a court trial of a common issue." *Ross* v. *Bernhard*, 396 U.S. 531, 537-538 (1970).

The approach adopted below—applying equitable *defenses* adjudicated by the court to defeat legal *claims* decided by the jury—sets Seventh Amendment values on their head. It overturns the jury's verdict based on the court's after-the-fact determination that an equitable principle should preclude the legal relief the jury found warranted. That defies the Seventh Amendment's command that, "[i]n Suits at common law, * * * the right of trial by jury shall be preserved." U.S. Const. amend. VII. And it contravenes the Seventh Amendment's directive that "no fact tried by a jury, shall be otherwise reexamined in any Court of the United States, than according to the rules of the common law." *Ibid.* A jury trial is an empty formality if the jury may find that a plaintiff has proved its entitlement to legal relief, but courts may overturn the verdict—not because of any defect in the trial or verdict—but because the court believes that legal relief is inequitable.

B. This Case Exemplifies the Problems

This case exemplifies the Seventh Amendment problems created by the Federal Circuit's approach. A jury's decision can be preclusive on courts in equity. Courts are thus prohibited from reconsidering issues the jury "necessarily decided * * * in the course of reaching its verdict." *United Access Techs., LLC* v. *Centurytel Broadband Servs. LLC*, 778 F.3d 1327, 1331 (Fed. Cir. 2015); accord *U.S. E.E.O.C.* v. *Century Broad. Corp.*, 957 F.2d 1446, 1463 (7th Cir. 1992). But the Federal Circuit's rule that a court can overturn the verdict itself, based on the court's own view that it is inequitable to provide the

plaintiff relief, eviscerates that principle. It effectively allows courts to retry the matter to themselves.

1. In this case, the courts invoked unclean hands based on findings of "business misconduct and litigation misconduct attributable to Merck." App., *infra*, 13a. But the jury heard the same allegations of misconduct, based on the same evidence, and found it unpersuasive or immaterial.

In finding unclean hands with respect to the '499 patent, the court invoked Durette's supposed "business misconduct" in "learning the confidential structure of Pharmasset compound PSI-6130 and pursuing patent claims to cover that compound in violation of the Merck-Pharmasset firewall." App., *infra*, 90a. But Gilead presented that very theory of misconduct to the jury. It urged that Merck stole the patented advance from Pharmasset through the companies' 2004 due-diligence call. Consequently, Gilead contended Merck's patents were "derived" from Pharmasset's invention and invalid. See p. 11, *supra*. Having heard Gilead's evidence regarding Durette's participation in the due-diligence call, and in amending the '499 patent's claims, the jury concluded that Merck had described and enabled—and thus invented—the subject matter claimed in the '499 and '712 patents by 2002, years before the 2004 call. See pp. 12-13, *supra*. The jury thus "necessarily decided" that Merck did not derive its invention from Gilead. *United Access*, 778 F.3d at 1331. The court's business-misconduct ruling contradicts the jury's conclusion.

The district court's finding of "litigation misconduct" was based on Durette's testimony at "deposition and then at trial" about his participation in the 2004 due-diligence call and his reasons for amending the '499 patent's claims. App., *infra*, 23a. The court believed that testimo-

ny was "inconsistent, contradictory, and untruthful." *Id.* at 94a. But all the supposed problems with Durette's testimony that Gilead raised in arguing unclean hands were presented to the jury. Gilead called Durette in its own case to impeach him with his deposition, and repeatedly emphasized inconsistencies between his deposition and trial testimony. The jury heard Gilead's counsel attack Durette's credibility in closing arguments. Yet the jury found for Merck. See pp. 12-13, *supra*. Either the jury believed Durette's testimony, or it agreed with Merck that his testimony was irrelevant. In the latter case, Durette's testimony lacked the "immediate and necessary relation" that unclean hands requires. *Keystone*, 290 U.S. at 245. Either way, the district court's decision to overturn the verdict because it thought the testimony *false* and *important* impermissibly contradicts the jury and violates the Seventh Amendment.

2. The district court's disregard of the jury's verdict is even more problematic for the '712 patent. For that patent, the court disavowed relying on its "finding of improper business conduct." App., *infra*, 113a n.5. It identified no false or inconsistent Durette testimony bearing on the '712 patent. The court applied unclean hands because Merck otherwise would suffer "no penalty" for "substantial litigation misconduct" in connection with the '499 patent. *Id.* at 113a. But unclean hands does not provide "punishment for extraneous transgressions." *Keystone*, 290 U.S. at 245.

That is not to say there is no remedy for litigant misconduct in connection with legal claims. Punishment is the domain of other remedies, like contempt and sanctions. Courts cannot convert flexible equitable principles into a freestanding basis for denying litigants legal relief, unbound from the rules-based requirements for punish-

ment in legal actions. See, *e.g.*, *Ins. Corp. of Ir., Ltd.* v. *Compagnie des Bauxites de Guinee*, 456 U.S. 694, 707 (1982) (noting that Rule 37 requires that sanctions be "specifically related to the particular 'claim' which was at issue"); *Drone Techs., Inc.* v. *Parrot S.A.*, 838 F.3d 1283, 1301 (Fed. Cir. 2016) (reciting factors governing dismissal as sanction).

The jury heard Gilead's evidence. Applying "the layman's common sense," *Parklane Hosiery Co.*, 439 U.S. at 343-344 (Rehnquist, J., dissenting) (citing O. Holmes, *Collected Legal Papers* 237 (1920)), the jury found that Merck had proved its case and was entitled to damages. The district court may have disagreed with that "layman's" decision. But equitable doctrines are not an acceptable basis for overturning the jury's verdict on legal issues and imposing a contrary result.

CONCLUSION

The petition should be granted.

Respectfully submitted.

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SEPTEMBER 2018

APPENDIX

APPENDIX A
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

NOS. 2016-2302, 2016-2615

GILEAD SCIENCES, INC.,

Plaintiff-Cross-Appellant,

v.

MERCK & CO., INC., MERCK SHARP & DOHME CORP., IONIS PHARMACEUTICALS, INC.,

Defendants-Appellants.

Appeals from the United States District Court for the Northern District of California in No. 5:13-cv-04057-BLF, Judge Beth Labson Freeman.

Decided: April 25, 2018

JUANITA ROSE BROOKS, Fish & Richardson, PC, San Diego, CA, argued for plaintiff-cross-appellant. Also represented by CRAIG E. COUNTRYMAN, JONATHAN ELLIOT SINGER; ELIZABETH M. FLANAGAN, DEANNA JEAN REICHEL, Minneapolis, MN; ROBERT M. OAKES, Wilmington, DE; EDMUND HIRSCHFELD, E. JOSHUA ROSENKRANZ, Orrick, Herrington & Sutcliffe LLP, New York, NY.

JEFFREY A. LAMKEN, MoloLamken LLP, Washington, DC, argued for defendants-appellants. Also represented

by JAMES A. BARTA, SARAH JUSTINE NEWMAN, MICHAEL GREGORY PATTILLO, JR.; SARA MARGOLIS, New York, NY; JESSAMYN SHELI BERNIKER, STANLEY E. FISHER, BRUCE GENDERSON, JESSICA PALMER RYEN, Williams & Connolly LLP, Washington, DC; MITCHELL EPNER, STEPHEN S. RABINOWITZ, Hughes Hubbard & Reed LLP, New York, NY.

Before TARANTO, CLEVENGER, and CHEN,
Circuit Judges.

TARANTO, *Circuit Judge*.

This case involves two patents relating to treatments for Hepatitis C. Merck & Co., Inc. and Ionis Pharmaceuticals, Inc. (formerly Isis Pharmaceuticals, Inc.) collaborated on research in the area and eventually obtained U.S. Patent Nos. 7,105,499 and 8,481,712. The patents, whose specifications are materially the same for present purposes, describe and claim classes of compounds, identified by structural formulas, and the administration of therapeutically effective amounts of such compounds. Gilead Sciences, Inc., developed its own Hepatitis C treatments—marketed now as Solvadi® and Harvoni®, both based on the compound sofosbuvir.

Gilead filed this action against Merck & Co., its subsidiary Merck Sharp & Dohme Corp., and Ionis (collectively, "Merck" unless the context indicates reference just to Merck & Co. and/or Merck Sharp). Gilead sought a declaratory judgment that Merck's '499 and '712 patents are invalid and that Gilead is not infringing by its activities involving its sofosbuvir products. Merck counterclaimed for infringement.

Gilead eventually stipulated to infringement based on the district court's claim construction, which is not chal-

lenged on appeal. A jury trial was held on Gilead's challenges to the patents as invalid for lack of both an adequate written description and enablement of the asserted claims (claims 1-2 of the '499 patent and claims 1-3, 5, 7, and 9-11 of the '712 patent) as well as Gilead's closely related defense that Merck did not actually invent the subject matter but derived it from another inventor, employed by Gilead's predecessor. The jury ruled for Merck and awarded damages.

The district court then held a bench trial on Gilead's equitable defenses, including unenforceability against Gilead based on the allegation that Merck had unclean hands regarding the patents. The district court ruled for Gilead, finding both pre-litigation business misconduct and litigation misconduct attributable to Merck, and it barred Merck from asserting the patents against Gilead. *Gilead Scis., Inc.* v. *Merck & Co.*, No. 13-cv-04057-BLF, 2016 WL 3143943, at *39 (N.D. Cal. June 6, 2016). Having so concluded, the district court subsequently deemed moot Gilead's motion for judgment as a matter of law of invalidity for lack of adequate written description and enablement. The court also awarded attorney's fees, relying on the finding of unclean hands.

Merck appeals the unenforceability judgment based on unclean hands. Gilead cross-appeals the denial of judgment as a matter of law of invalidity, but it asks us to reach that issue only if we set aside the unenforceability judgment. We have jurisdiction under 28 U.S.C. § 1295(a)(1). We affirm the judgment based on unclean hands, concluding that it is sufficiently supported by findings that withstand review for clear error. We therefore do not reach the issues raised by Gilead's conditional cross-appeal.

I

A

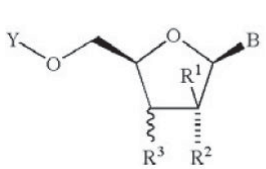
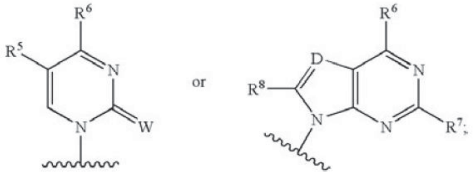
In 1998, Merck and Isis began collaborating on finding a way to block propagation of the Hepatitis C virus (HCV) by impeding the synthesis of its RNA. J.A. 20291. The collaborators sought a molecule that would have two properties. First, an enzyme involved in RNA assembly (NS5B polymerase) would recognize the molecule as a building block and add it to the growing RNA chain during replication of the virus's RNA. Second, the addition of this molecule would effectively stop further RNA assembly before completion and, hence, end RNA replication and prevent viral propagation.

Starting in 2001, the two collaborators filed a series of patent applications related to antiviral agents for Hepatitis C. Dr. Phillipe Durette, a Merck chemist who had become a patent attorney, was central to their initial patenting efforts. J.A. 20301. A provisional patent application dated January 22, 2001, summarizes the invention as "a method for inhibiting hepatitis C virus (HCV) NS5B polymerase, a method for inhibiting HCV replication, and/or a method for treating HIV infection" by administering a "therapeutically effective amount of a compound of structural formula I." J.A. 25808. It sets forth and claims large families of possible structures in Markush format: it displays a number of configurations of nucleic acid derivatives and shows variables at a number of locations in the structures (*e.g.*, different bases, different molecules attached to the sugar ring), the variables each stated to represent any of a substantial number of possible constituents. J.A. 25803-980.

The same is true of Merck's two January 2002 applications under the Patent Cooperation Treaty (PCT applications). J.A. 24832, 26913. One of those became Merck's

July 2003 U.S. application 10/250,873, which issued as the '499 patent. J.A. 150, 27227. A non-provisional U.S. application filed in January 2002 led to the 2007 application that issued as the '712 patent. J.A. 223. The number of possible combinations within the Markush groups is very large.

One instance of the formulas in the written description, from the 2003 application that issued as the '499 patent, is:

> structural formula III which is of the stereochemical configuration:
>
> 
> (III)
>
> wherein B is
>
> 
>
> D is N, CH, C—CN, C—NO2, C—C_{1-3} alkyl, C—$NHCONH_2$, C—$CONR^{11}R^{11}$, C—$CSNR^{11}R^{11}$, C—$COOR^{11}$, C-hydroxy, C—C_{1-3} alkoxy, C-amino, C—C_{1-4} alkylamino, C-di(C_{1-4} alkyl) amino, C-halogen, C-(1,3-6oxazol-2-yl), C-(1,3-thiazol-2-yl), or C-(imidazol-2-yl); wherein alkyl is unsubstituted or substituted with one to three groups independently selected from halogen, amino, hydroxy, carboxy, and
>
> C_{1-3} alkoxy;

W is O or S;

Y is H, C_{1-10} alkylcarbonyl, $P_3O_9H_4$, $P_2O_6H_3$, or $P(O)R^9R^{10}$;

R^1 is hydrogen, CF_3, or ***C_{1-4} alkyl*** and one of R^2 and R^3 is OH or C_{1-4} alkoxy and the other of R^2 and R^3 is selected from the group consisting of

hydrogen,

hydroxy,

fluoro,

C_{1-3} alkyl,

trifluoromethyl,

C_{1-8} alkylcarbonyloxy,

C_{1-3} alkoxy, and

amino; or

R^2 is hydrogen, CF_3, or C_{1-4} alkyl and one of R^1 and R^3 is OH or C_{1-4} alkoxy and the other of R^1 and R^3 is selected from the group consisting of

hydrogen,

hydroxy,

fluoro,

C_{1-3} alkyl,

trifluoromethyl,

C_{1-8} alkylcarbonyloxy,

C_{1-3} alkoxy, and

amino; or

R^1 and R^2 together with the carbon atom to which they are attached form a 3- to 6-membered saturated monocyclic ring system optionally con-

taining a heteroatom selected from O, S, and NC_{0-4} alkyl;

R^6 is H, OH, SH, NH_2, C_{1-4} alkylamino, di(C_{1-4} alkyl) amino, C_{3-6} cycloalkylamino, halogen, C_{1-4} alkyl, C_{1-4} alkoxy, or CF_3;

R^5 is H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} alkylamino, CF_3, or halogen;

R^7 is hydrogen, amino, C_{1-4} alkylamino, C_{3-6} cycloalkylamino, or di(C_{1-4} alkyl)amino;

each R^{11} is independently H or C_{1-6} alkyl;

R^8 is H, halogen, CN, carboxy, C_{1-4} alkyloxycarbonyl, N_3, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl) amino, hydroxy, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, or (C_{1-4} alkyl)$_{0-2}$ aminomethyl; and

R^9 and R^{10} are each independently hydroxy, $OCH_2CH_2SC(=O)$t-butyl, or $OCH_2O(C=O)$iPr;

with the provisos that (a) when R^1 is hydrogen and R^2 is fluoro, then R^3 is not hydrogen, trifluoromethyl, fluoro, C_{1-3} alkyl, amino, or C_{1-3} alkoxy; (b) when R^1 is hydrogen and R^2 is fluoro, hydroxy, or C_{1-3} alkoxy, then R^3 is not hydrogen or fluoro; and (c) when R^1 is hydrogen and R^2 is hydroxy, then R^3 is not β-hydroxy.

'499 Patent, col. 13, line 5 through col. 14, line 17 (emphases added to highlight terms of particular interest for this case); J.A. 27245-47.[1]

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[1] The top figure shows the key elements of the nucleoside. B is the base, shown in the next two figures in single-ring (pyrimidine) and double-ring (purine) versions. R^1 and R^2 are located at the 2' (carbon) position on the ring, with R^1 at the 2' "up" location and R^2 at the 2' "down" location. R^3 is at the 3' position.

Various claims appeared in Merck's patent applications based on that structural formula or related ones, including claims 6 and 8 of the January 2001 provisional, J.A. 25954-56, claims 6 and 8 of the PCT application that issued as the '499 patent, J.A. 25036-38, and claim 44 of that same application, which was added, substituting for earlier claims, immediately upon filing the U.S. version in July 2003, J.A. 27482-83. The 2003-added claim 44 of the 2003 application, for example, recites the above structural formula but is limited to the single-ring bases shown above (pyrimidine bases, such as cytosine and uracil). It therefore omits the above-quoted language concerning D, R^7, and R^8, which appear only on the double-ring bases shown above (purine bases, such as adenine and guanine). *Id.*

Claim 44 of the 2003 application and its PCT counterpart, like the structural formula III, encompasses, among the large number of possible combinations of values of the variables, structures having (i) a single-ring base, (ii) a methyl (C_1 alkyl) in the R^1 position, and (iii) a fluoro in the R^2 or R^3 position. J.A. 25036-38, 27482-83. A subgenus with those characteristics—which embraces both a metabolite of Gilead's sofosbuvir and an earlier identified compound that was modified to arrive at sofosbuvir, and which Merck eventually focused on in new claims in 2005—is central in this case.

B

In 2002, a pharmaceutical company called Pharmasset, which was later acquired by Gilead, was researching Hepatitis C treatments. When one of Merck's early applications was published that year, Pharmasset reviewed the application, looking for "loopholes." J.A. 20048 (533). After reviewing Merck's application, Jeremy Clark, a chemist at Pharmasset, proposed the compound PSI-

6130 (the compound that led to sofosbuvir). *Id.* (533-534). PSI-6130 had a single-ring base (cytosine), a methyl in the 2' up position, and a fluoro in the 2' down position. J.A. 24619, 24826. Pharmasset synthesized and tested PSI-6130 by May 2003. J.A. 20040 (504). It was the first compound made by Pharmasset that was active against Hepatitis C. J.A. 20050-51 (544-45). PSI-6130 led to sofosbuvir, which has the same methyl and fluoro substituents as PSI-6130 but contains uracil, rather than cytosine, as its base. J.A. 19913-17, 19951 (401).

Pharmasset filed a patent application for Mr. Clark's invention in May 2003. J.A. 20042 (511-12). The application was published in January 2005. The published application, the "Clark Application," described and claimed (in 129 claims) a range of structures, including both single-ring (pyrimidine) and double-ring (purine) bases, and methods of using them for treatment of various conditions, including Hepatitis C. J.A. 23709-86. Among the many specifically described and claimed structures was PSI-6130. J.A. 23727 (application ¶168), 23756 (claim 26). The application issued in September 2008 as U.S. Patent No. 7,429,572, with only 19 claims, which cover PSI-6130. J.A. 29947-87.

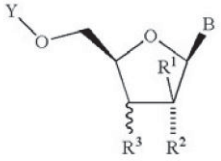
C

In February 2005, the month after the January 2005 publication of the Clark Application, Merck, through Dr. Durette, filed a narrowing amendment in the 2003 application that eventually issued as the '499 patent. J.A. 28318-21. Merck canceled all pending claims and substituted two narrower claims (claims 53 and 54). The claims issued as claims 1 and 2 of the '499 patent on September 12, 2006.

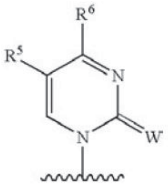
Claim 1 of the '499 patent is representative. It states:

1. A method of treating hepatitis C virus (HCV) infection comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of structural formula III, or a pharmaceutically acceptable salt or acyl derivatives thereof,

(III)



wherein B is



W is O or S;

Y is H, C_1-10 alkylcarbonyl, $P_3O_9H_4$, $P_2O_6H_3$, or $P(O)R^9R^{10}$;

R^1 is CF_3, or C_{1-4} alkyl and one of R^2 and R^3 is OH or C_{1-4} alkoxy and the other of R^2 and R^3 is fluoro;

R^6 is H, OH, SH, NH_2, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{3-6} cycloalkylamino, halogen, C_{1-4} alkyl, C_{1-4} alkoxy, or CF_3;

R^5 is H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} alkylamino, CF_3, or halogen; and

R^9 and R^{10} are each independently hydroxy, $OCH_2CH_2SC(=O)$t-butyl, or $OCH_2O(C=O)$iPr.

'499 Patent, col. 137, line 2 through col. 138, line 16. Merck seems to accept that the '499 patent claims include

PSI-6130. Merck Br. 18. Gilead characterizes the claim as "target[ing]" PSI-6130. Gilead Br. 16, 18.

We will elaborate below on the connection of Pharmasset's work on PSI-6130 with Dr. Durette, Merck, and Merck's 2005 claim amendments for what became the '499 patent. Those connections, together with Dr. Durette's eventual testimony about those connections, came to be the basis of the district court's ultimate determination that Merck had unclean hands, precluding patent enforcement against Gilead.

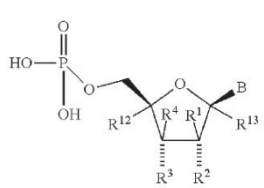
D

In February 2007, a few months after the '499 patent issued, Merck's Dr. Durette filed the application that ultimately issued as the '712 patent. J.A. 24147. The original claims of that application were quite different from PSI-6130, J.A. 24336-41, and Dr. Durette immediately substituted two claims that were closer, but that the parties here do not contend covered PSI-6130, J.A. 24150-53. It appears undisputed that after April 2007 Dr. Durette did not participate in prosecuting the '712 application. Merck Br. 18; see *e.g.*, J.A. 24369-70 (April 2007 filing by the attorney who took over responsibility for prosecuting the application from Dr. Durette).

In 2010, Pharmasset published an article in the Journal of Medicinal Chemistry describing "sofosbuvir" (PSI-7977) to treat HCV. J.A. 31990-2007. In 2011, attorney Jeffrey Bergman took over prosecuting the '712 application for Merck. J.A. 32383. Merck amended the '712 application to include new claims. J.A. 24394-410. The '712 patent issued on July 9, 2013.

Claim 1 of the '712 patent is representative. It states:

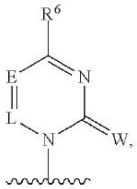
1. A compound having the formula:



(VIII)

or a pharmaceutically acceptable salt thereof, wherein:

B is:



L is CH or N;

E is N or CR^5;

W is O or S;

R^1 is C_{2-4} alkenyl, C_{2-4} alkynyl, or C_{1-4} alkyl optionally substituted with amino, hydroxy, or 1 to 3 fluorine atoms; R^3 is hydroxy or C_{1-4} alkoxy; and R^2 is selected from the group consisting of

halogen,

C_{1-4} alkyl, optionally substituted with 1 to 3 fluorine atoms,

C_{1-10} alkoxy, optionally substituted with C_{1-3} alkoxy or 1 to 3 fluorine atoms,

C_{2-6} alkenyloxy,

C_{1-4} alkylthio,

C_{1-8} alkylcarbonyloxy,

aryloxycarbonyl,

azido,

amino,

C_{1-4} alkylamino, and

di(C_{1-4} alkyl)amino;

R^4 and R^6 are each independently H, OH, SH, NH_2, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{3-6} cycloalkylamino, halogen, C_{1-4} alkyl, C_{1-4} alkoxy, or CF_3;

R^5 is H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} alkylamino, CF_3, or halogen;

R^{12} and R^{13} are each independently hydrogen or methyl.

'712 Patent, col. 143, lines 2-54. The parties characterize these claims, which embrace a single-ring base with methyl up and fluoro down at the 2' position in the sugar, as covering metabolites of sofosbuvir, produced in the body after administration of sofosbuvir. Merck Br. 18; Gilead Br. 19. As noted above, in this case Gilead ultimately stipulated to infringement of the asserted claims of the '712 and '499 patents based on the district court's claim construction.

II

After a bench trial on Gilead's equitable defenses, the district court held that Merck could not enforce the two patents at issue here against Gilead because its conduct gave it unclean hands. *Gilead*, 2016 WL 3143943, at *39. The court rested that determination on its findings of both pre-litigation business misconduct and litigation misconduct attributable to Merck. *Id.* at *27. The court balanced the equities and applied its determination to both patents. *Id.* at *37-39.

The Supreme Court has articulated the governing legal standard. In *Keystone Driller Co.* v. *General Excavator Co.*, the Court explained that a determination of unclean hands may be reached when "misconduct" of a party seeking relief "has immediate and necessary relation to the equity that he seeks in respect of the matter in litigation," *i.e.*, "for such violations of conscience as in some measure affect the equitable relations between the parties in respect of something brought before the court." 290 U.S. 240, 245 (1933). In *Precision Instrument Manufacturing Co.* v. *Automotive Maintenance Machinery Co.*, the Court stated that the doctrine "closes the doors of a court of equity to one tainted with inequitableness or bad faith relative to the matter in which he seeks relief, however improper may have been the behavior of the defendant," and requires that claimants "have acted fairly and without fraud or deceit as to the controversy in issue." 324 U.S. 806, 814-15 (1945). The Court added that the doctrine "necessarily gives wide range to the equity court's use of discretion in refusing to aid the unclean litigant." *Id.* at 815; see also *Northbay Wellness Grp., Inc.* v. *Beyries*, 789 F.3d 956, 960 (9th Cir. 2015) (explaining need for equitable balancing).[2]

Merck invokes the term "material" to describe the kind of connection between misconduct and the litigation that the Supreme Court's formulations require. But Merck has not identified how that term helpfully refines the Supreme Court's standard in a way that is relevant to

[2] The doctrine of unclean hands is not patent-specific, but its application to patents has some distinctive features affecting the patent system. We need not choose between Ninth Circuit and Federal Circuit law on the subject here. The parties have identified no differences pertinent to this case, and they have not identified what law they contend controls in this appeal.

this case. See Merck Br. 39-43. For purposes of this case, which involves clear misconduct in breaching commitments to a third party and clear misconduct in litigation, the "immediate and necessary relation" standard, in its natural meaning, generally must be met if the conduct normally would enhance the claimant's position regarding legal rights that are important to the litigation if the impropriety is not discovered and corrected. Merck cites no authority holding such misconduct to be outside *Keystone*'s scope. Nor does Merck deny that the standard can cover at least some misconduct that ultimately fails to affect the litigation, as when it is discovered before it bears fruit, as long as its objective potential to have done so is sufficient.

Significantly, this is not a case in which it is clear that the identified misconduct could not reasonably have enhanced the claimant's legal position as to either the creation or the enforcement of the legal rights at issue. Nor is this a case involving alleged deficiencies in communications with the PTO during patent prosecution, for which this court's inequitable-conduct decisions, *e.g.*, *Therasense, Inc.* v. *Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc), set important limits on conclusions of unenforceability through that doctrine.[3] In the circumstances present in this case, we see no genuine issue about the governing legal standard, but only its application.

We conclude that the district court made findings that have adequate support in the evidence and that, taken

[3] We therefore have no occasion in this case to consider issues that may arise in seeking to ensure that the unclean-hands doctrine operates in harmony with, and does not override, this court's inequitable-conduct standards governing unenforceability challenges based on prosecution communications with the PTO.

together, justify the equitable determination of unclean hands as a defense to enforcement in this case. In so concluding, we apply deferential standards of review, as Merck itself urges. We review the district court's ruling for abuse of discretion, which means that we review factual findings only for clear error. See Merck Br. 37 (citing *Northbay*, 789 F.3d at 959).

Our decision rests only on the totality of the evidence-supported misconduct we summarize, not individual elements alone and not every finding of the district court. We are conscious, as any court presented with a defense of unclean hands must be, both of the judicial system's vital commitment to the standards of probity protected by the doctrine and, also, of the potential for misuse of this necessarily flexible doctrine by parties who would prefer to divert attention away from dry, technical, and complex merits issues toward allegations of misconduct based on relatively commonplace disputes over credibility. Having those considerations in mind, we do not find a sufficient basis to set aside the district court's determination of unclean hands under the applicable deferential standard of review.

A

The district court found, with adequate evidentiary support, two related forms of pre-litigation business misconduct attributable to Merck. First, Dr. Durette learned of Pharmasset's PSI-6130 structure by participating, at Merck's behest, in a conference call with Pharmasset representatives, violating a clear "firewall" understanding between Pharmasset and Merck that call participants not be involved in related Merck patent prosecutions. Second, Merck continued to use Dr. Durette in the related patent prosecutions even after the call. The district court also found, with adequate eviden-

tiary support, a direct connection to the ultimate patent litigation involving sofosbuvir. Thus, Dr. Durette's knowledge of PSI-6130, acquired improperly, influenced Merck's filing of narrowed claims, a filing that held the potential for expediting patent issuance and for lowering certain invalidity risks. Those findings establish serious misconduct, violating clear standards of probity in the circumstances, that led to the acquisition of the less risky '499 patent and, thus, was immediately and necessarily related to the equity of giving Merck the relief of patent enforcement it seeks in this litigation.

1

The business misconduct found in this case grows out of Merck's dealings with Pharmasset. In the early 2000s, the two companies discussed possible business arrangements that would include work on "discovery and development of antiviral agents against . . . hepatitis C virus." *Gilead*, 2016 WL 3143943, at *6. They entered into a non-disclosure agreement in January 2001. *Id.*

In September 2003, Pharmasset gave Merck certain information about Pharmasset's NS5B Nucleoside Inhibitor, *i.e.*, PSI-6130. *Id.*; J.A. 32161-81. In October 2003, the companies signed a Material Transfer Agreement under which Pharmasset would give Merck the "Pharmasset HCV NS5B Nucleoside Inhibitor" for Merck to evaluate. *Gilead*, 2016 WL 3143943, at *7; J.A. 30077-83. The Agreement allowed Merck to test PSI-6130 as long as it did not try to discern the compound's chemical structure. *Gilead*, 2016 WL 3143943, at *7; J.A. 30078 ¶3.1.

In January 2004, Merck asked Pharmasset to furnish more information to a "firewalled" Merck medicinal chemist—meaning that the chemist was "firewalled" from Merck's own Hepatitis C program. *Gilead*, 2016

WL 3143943, at *7-8; J.A. 32183-86. Pharmasset agreed to provide information to Merck's chemist, Dr. Ashton, on the conditions that the information was subject to the 2001 non-disclosure agreement and, what is critical here, that it was to be shared only on a "'fire walled' basis." J.A. 22921-22; *Gilead*, 2016 WL 3143943, at *7-8. In February 2004, Merck's "firewalled" chemist determined that "PSI6130 and its relatives represent a potentially good fit with Merck's existing anti-HCV portfolio arising from the Isis collaboration." J.A. 22918-19.

Merck and Pharmasset then scheduled, for March 17, 2004, a conference call during which Pharmasset would disclose the structure of PSI-6130. J.A. 23706-07; see *Gilead*, 2016 WL 3143943, at *8. Merck planned to have Dr. Durette, Merck's patent prosecutor for what became the '499 patent, "view the structure" during the call. J.A. 23706-07; *Gilead*, 2016 WL 3143943, at *8; see also J.A. 19945 (375) (Dr. Durette's supervisor asked him to participate in the call). The district court found that Dr. Durette knew before the call "that any information he learned about Pharmasset's PSI-6130 nucleoside analog compound would overlap with the subject matter of his patent prosecution docket for Merck, thereby creating a conflict." *Gilead*, 2016 WL 3143943, at *9.

On the March 17, 2004 call, before disclosing the compound's structure, Pharmasset confirmed the importance of the firewall to it by asking whether the two participating Merck employees (Dr. Durette and Dr. Pon) were within the firewall separating Merck call participants from related Merck HCV patenting efforts. *Id.*; J.A. 31544-45; J.A. 19947 (382). At some point in the call, the Merck participants said that they were within the firewall. *Gilead*, 2016 WL 3143943, at *9-10; J.A. 31544-45; J.A. 19960 (435). Pharmasset's notes from the call, how-

ever, also indicate some disclosure by Dr. Durette of a conflict issue for him: "It's a problem for Phil Durette; he needs to have a conversation with his supervisor; 'seems quite related to things that I'm involved with.' . . . [H]e is personally conflicted; not the company." J.A. 31545; see *Gilead*, 2016 WL 3143943, at *9-10. The PSI-6130 structure was disclosed during the call. *Id.* at *9.

After the March 17, 2004 call, Dr. Durette stopped participating in the work of the Merck team dealing with Pharmasset. J.A. 19944 (373). But Merck kept him working as the prosecuting attorney for its patent applications related to nucleosides that inhibit Hepatitis C virus replication. *Gilead*, 2016 WL 3143943, at *10 ("Instead of withdrawing from prosecution, Dr. Durette continued to prosecute Merck's HCV patent applications and write new claims that targeted Pharmasset's work."). The court found that neither Merck nor Dr. Durette provided any explanation as to why he was not removed from further prosecution of the Merck patent applications. *Id.*

Those facts support the district court's findings of serious business misconduct. Merck sent Dr. Durette to participate in the March 2004 call despite the clear firewall and the fact that "Merck . . . knew that Pharmasset's compound was an NS5B polymerase inhibitor just like its own compounds from the Merck-Isis collaboration." *Id.* at *28. "Dr. Durette's involvement with Merck's HCV patents violated the understanding the parties had about their firewall obligations, which excluded anyone involved with Merck's internal HCV program." *Id.* And after the call, it was "wrong for Merck to allow Dr. Durette to continue to prosecute" the Merck applications: he continued prosecution of the application that became the '499 pa-

tent, and in 2007 he filed (and immediately amended) the application that became the '712 patent. *Id.*[4]

2

The district court found, with sufficient basis, that the wrongful business conduct had the required connection to this patent litigation. *Id.* at *29. As laid out above, in February 2005, a month after the publication of Pharmasset's Clark Application, Dr. Durette amended the Merck application that ultimately issued as the '499 patent by canceling the broad genus claims and substituting claims that narrowed the scope to a subgenus focused on the key features of PSI-6130. *Id.* at *11. The district court found that "Dr. Durette would not have written new claims to cover PSI-6130 in February 2005 but for his improper participation on the March 17, 2004 patent due diligence call and learning the structure of PSI-6130 ahead of the structure being published." *Id.*

Given that Dr. Durette learned of the PSI-6130 structure in March 2004 (as is now conceded), the district

[4] The court added that Merck's own "corporate policy forb[ade] Merck's patent prosecutors from participating in licensing discussions in an area related to their prosecution work." *Id.* at *9 (citing J.A. 22341 (38-39)); see *id.* at *28; J.A. 22374 (170-71). That policy, as we note below, confirms the connection between (a) Merck's patent prosecutor learning the structure of PSI-6130 during the March 2004 call and (b) Merck's patenting and the resulting litigation. To the extent that the district court suggested that the violation of Merck's internal policy was an independent basis for finding wrongful conduct, even apart from the violation of the firewall understanding, we see no basis for such a suggestion. A patent-obtaining firm may legitimately have such a policy simply to avoid having its later litigation position weakened by exposure to information gained from licensing discussions. Violation of such a policy would be a wrong to the firm but not to the potential licensee, or the judicial system, in the absence of other understandings, such as the firewall understanding here.

court could readily find that his knowledge from the call played a significant role in his actual process of decision-making that led him to file claims focusing on that and similar structures. Dr. Durette admitted during his deposition that participation in the March 2004 call, which he at the time denied, "would have tainted [his] judgment as to what claims to pursue in the Merck/Isis collaboration." J.A. 22341 (38). The timing of Merck's February 2005 amendment, which occurred just one month after the structure of PSI-6130 was published in January 2005, supports the inference, as the district court put it, that Merck was deliberately "wait[ing]." *Gilead*, 2016 WL 3143943, at *11 ("Dr. Durette waited to amend the claims . . . until Clark application was published"). Dr. Durette provided support for the inference of a taint when he stated in his deposition that failing to keep participants in the March 2004 call separate from the patent prosecutors "could raise issues down the road on the patent that would issue based on the attorneys prosecuting of those patents." J.A. 22374 (171).[5]

The additional finding that Dr. Durette would not otherwise have made the February 2005 amendment is not clearly erroneous. Dr. Durette's testimony at his deposition greatly downplayed the role of the sole prominent candidate for an independent cause of the February 2005 amendment, namely, the January 2005 Clark Application.

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[5] The timing of the amendment undermines a different, but ultimately immaterial, finding of the district court—that Merck violated the non-disclosure agreement with Pharmasset. *E.g.*, *Gilead*, 2016 WL 3143943, at *10, *27, *29. The only identified forbidden use of information covered by the agreement—Dr. Durette's February 2005 claim amendment focusing on PSI-6130—did not occur until the information was publicly disclosed in the Clark Application. The disclosure ended the information's protection by the agreement. J.A. 32152 ¶3(ii).

In doing so, Dr. Durette gave testimony that is capable of being read as suggesting that the Clark Application alone would not have led him to amend the claims. J.A. 22344-46. Significantly, Merck did not present evidence that would compel a finding, or even meaningfully argue for a finding, that even if Dr. Durette personally had not made the February 2005 amendment, others at Merck lacking the earlier knowledge of PSI-6130 would have done something equivalent so as to break any causal connection between the business misconduct and the patent-rights benefits associated with the amendment. See Defs.' [Proposed] Findings of Fact and Conclusions of Law Regarding Gilead's Equitable Defenses, *Gilead Scis., Inc.* v. *Merck & Co., Inc., et al.*, Case No. 5:13-cv-04057-BLF, D.I. 407 at 27-28 (¶¶113-15) (N.D. Cal. Apr. 22, 2016) (brackets in document name in original).

Although Merck stresses that even the pre-February 2005 claims *included* PSI-6130 and similar structures, Dr. Durette explained the benefits to a patentee's legal position from a narrowing amendment of this sort. "It would expedite prosecution." J.A. 22347 (62); see J.A. 19945 (376) ("the Examiner would have less subject matter to . . . search"). Relatedly, "limiting the scope" of the claims would mean "fewer opportunities for prior art to . . . present an issue of patentability" under 35 U.S.C. §§102 and 103. J.A. 22347 (62). That would be so during prosecution and also in a litigation challenge. And a narrowing amendment can reduce a patentee's risk on other invalidity issues, such as the risk that breadth can create under the requirement that the "full scope" of a claim be enabled. See, *e.g.*, *Amgen Inc.* v. *Sanofi*, 872 F.3d 1367, 1375 (Fed. Cir. 2017). Such risks can be reduced even if, as here, the resulting claim still covers a large, though less large, number of compounds.

In these circumstances, we see no error in the district court's determination that the pre-litigation business misconduct we have summarized was immediately and necessarily related to the equity of Merck's obtaining enforcement of its patent in this litigation.

B

The district court also found, with adequate evidentiary support, essentially two forms of litigation misconduct involving Dr. Durette as a witness and attributable to Merck. First, in his deposition, where he appeared partly as Merck's corporate witness on issues to which the March 2004 call was relevant, Dr. Durette gave testimony that he did not participate in the March 2004 call—testimony that was later conceded to be false and that the court found to be intentionally so. Second, both in the deposition and then at trial, Dr. Durette, in support of Merck's validity positions, gave testimony about the role the January 2005 Clark Application played in Dr. Durette's filing of the February 2005 amendment that the court found so incredible as to be intentionally false. The intentional testimonial falsehoods qualify as the kind of misconduct that can, in these circumstances, support a determination of unclean hands. The court also found, with adequate evidentiary support, that the false testimony, in both respects, bore on the origin story of the February 2005 amendment, which was relevant to the invalidity issues in the litigation and hence immediately and necessarily related to the equity of the patent-enforcement relief Merck seeks in this case.

1

In 2015, during the discovery phase of this case, Merck designated Dr. Durette as its corporate witness under Fed. R. Civ. P. 30(b)(6) on certain issues, even though he had retired from Merck in 2010. *Gilead*, 2016

WL 3143943, at *12; J.A. 22335 (15-16), 22377 (181-84); J.A. 22214. In particular, Merck designated him to represent the corporation regarding the prosecution of the application that issued as the '499 patent. *Gilead*, 2016 WL 3143943, at *12; J.A. 22214-16 (¶¶15-21). Dr. Durette was not Merck's representative regarding the 2007 application that issued as the '712 patent, *id.* (¶¶20-21), though he filed that application.

On May 8, 2015, Gilead deposed Dr. Durette in both his personal and his representative capacities. J.A. 22331-83. Near the end of the deposition, Dr. Durette stated that his answers regarding the '499 patent would not differ according to the capacity in which he was testifying. J.A. 22377 (183-84). Merck's counsel represented both Merck and Dr. Durette at the deposition. *Gilead*, 2016 WL 3143943, at *12; J.A. 22333 (7). Dr. Durette testified that, in preparation for his deposition, he met with Merck's outside counsel for six to seven hours on each of two days and spent eight to ten additional hours on his own. *Gilead*, 2016 WL 3143943, at *12; J.A. 22334 (10-11).

Dr. Durette gave two different answers about whether he participated in the March 17, 2004 call with Pharmasset. Near the start of the deposition, J.A. 22336 (19), and toward the end of the deposition, J.A. 22374-75 (172-73), he repeatedly said that he did not recall participating. But during a portion of the deposition not long after it started (corresponding to about nine pages of the transcript), Dr. Durette repeatedly stated, definitively, that he did not participate. J.A. 22339-41 (30-38); see, *e.g.*, J.A. 22339 (31) ("sure" that he was not involved in any discussion with Pharmasset in March 2004 where he was told of PSI-6130's structure); J.A. 22341 (37) ("I never participated in a due diligence meeting on March 17 . . . .

I did not participate in any meeting of due diligence on March 17"). One reason that he was so sure, he said, was that it would have violated Merck policy to allow his participation and to keep him on the related patent prosecutions. J.A. 22341 (38-39), 22373-74 (168-72); 22382 (202). On the basis of those definitive denials, the district court found that "[w]hen asked about the March 17, 2004, call at the deposition, Dr. Durette denied ever having been on such a call. When asked whether he was sure that he was not on the March 17, 2004, call, Dr. Durette unequivocally answered yes." *Gilead*, 2016 WL 3143943, at *12.

That denial of participation was false, as came to be undisputed by Merck, and acknowledged by Dr. Durette, at trial. See *id.* at *14; J.A. 19937-38 (344-47). The district court found the falsity of the deposition denial of participation to be intentional. *Gilead*, 2016 WL 3143943, at *29-31. We cannot deem that state-of-mind finding to be clearly erroneous, given the district court's direct observation of Dr. Durette at the trial; the documentary evidence of his participation, including pre-participation emails (some that he reviewed during his deposition); and the sufficiently supported findings that aspects of his testimony were "inconsistent, contradictory, and untruthful." *Id.* at *29; see *id.* at *12-16.

Regarding the role of the January 2005 Clark Application in Dr. Durette's decision to file new claims in February 2005, Dr. Durette downplayed that role in ways that the district court reasonably found incredible. Most starkly, at his deposition, he stated that he simply did not recall whether he saw the Clark Application before filing the February 2005 amendment and hence could not state that it played a role in the amendment. See *id.* at *16; J.A. 22343-44 (48-52), 22348-49 (66-69).

Before trial, the court denied Merck's motion to exclude all evidence post-dating 2002 from the jury trial regarding invalidity—a denial not separately challenged as incorrect here. J.A. 19220-22 (denying exclusion because the information was relevant to invalidity issues). Once that motion was denied, Merck itself indicated that it would call Dr. Durette as a witness. J.A. 19404 (42) (Merck explaining that Dr. Durette is "planning to come and testify in our case"). Gilead then took the opportunity to call Dr. Durette first, cross-examining him before Merck conducted its direct examination regarding validity issues, including the origin of the February 2005 amendment.

In his trial testimony, Dr. Durette continued to downplay the role of the Clark Application, though to a lesser extent than during the deposition. See *Gilead*, 2016 WL 3143943, at *16. Explaining his decision to file the amendment, he stressed that he narrowed the claims to "expedite" examination, *id.* at *17; J.A. 19944-45 (371-75), and said that "he amended the '499 claims to focus on 'get[ting] allowance on the subject matter that was most important to the [Merck-Isis] collaboration,'" *Gilead*, 2016 WL 3143943, at *17; J.A. 19952 (404). He also testified, however, that he had "bec[o]me convinced that it was the publication of the [Clark] [A]pplication that led [him] to reexamine" the prosecution of the application that became the '499 patent and file the February 2005 amendment. J.A. 19949 (390-91); *Gilead*, 2016 WL 3143943, at *16. The district court could reasonably find that, by stating that it was surrounding circumstances that so convinced him, not his own recollection, Dr. Durette was continuing to minimize the actual role of the Clark Application and what he learned in the March 2004 call, *i.e.*, the role of Pharmasset's work, in his amendment

decision for Merck. As already noted above, the court reasonably found that he had in mind the information he learned in the March 2004 call, that he was waiting for publication of PSI-6130's structure to avoid violating the non-disclosure agreement, and that he filed the February 2005 amendment once publication of the Clark Application occurred. In light of those findings, it was also reasonable for the district court to find Dr. Durette's trial testimony a misleading effort to downplay the role of Pharmasset's work in the February 2005 amendment.

The district court found that "Dr. Durette's changing and evasive explanations for why he narrowed the claims undermine his testimony" and that "his testimony [was] not credible." *Id.* at *17. It found that Dr. Durette's testimony that "he amended the '499 claims to focus on 'get[ting] allowance on the subject matter that was most important to the [Merck-Isis] collaboration' is contrary to the evidence and is not credible because Merck never tested any of the claimed compounds" until after the Clark Application was published. *Id.* The testimony downplaying the role of Pharmasset's work—published in the Clark Application, first disclosed to Dr. Durette in March 2004—the court found "not credible" and "false." *Id.*

2

The district court properly charged Merck with the consequences of the testimony, at the deposition and at the trial, that the court found to be intentionally false. *Id.* at *29 ("[T]he record shows that . . . [Dr. Durette's] testimony was sponsored by Merck."). As already noted, not only did Merck's counsel appear as counsel for Dr. Durette at his deposition, and prepare him for it, but Dr. Durette was Merck's official corporate representative on matters (the origin of the '499 patent) to which the testi-

mony at issue was relevant. As also already noted, Dr. Durette appeared at trial after Merck indicated that it was going to call him to testify about invalidity matters, to which the testimony at issue here had been held relevant.

The testimony, relevant to issues in the case and reasonably found to be intentionally false, had an immediate and necessary relation to the equity of the patent-enforcement relief Merck seeks in this litigation. The district court held that the origin of the February 2005 amendment, and hence Dr. Durette's testimony about that, was relevant to the invalidity issues to be tried. *Id.* at *14 ("At trial, Dr. Durette provided key testimony for Merck on validity issues, including written description of the '499 Patent."); *id.* at *32 (determining that the testimony was "directed at and supported Merck's validity arguments, and went to the heart of significant issues in this case"). The verdict form made explicit that lack of written description and lack of enablement were tied to the defense of "derivation from Jeremy Clark" (the Pharmasset inventor of PSI-6130)—the latter to be addressed only if the jury found either lack of an adequate written description or lack of enablement. J.A. 21066-75. Merck's own policy of separating patent prosecutors from discussions like the ones held with Pharmasset is confirmation that Merck recognized, as Dr. Durette testified, that the origin of patent claims could matter in eventual litigation over those claims. See J.A. 22341 (39-40). In this case, downplaying the role of the Clark Application (and the March 2004 call) naturally served to aid Merck's case that it did not derive the claimed inventions from Pharmasset's Jeremy Clark. In these circumstances, the district court could reasonably determine that the testimony at issue here held a significant potential to give

Merck an advantage in the litigation, satisfying the *Keystone* standard.

C

We see no reversible error in the district court's balancing of the equities. *Gilead*, 2016 WL 3143943, at *37-39. As to the '499 patent, the equity balance follows directly from the determinations already described: the misconduct leading to the February 2005 amendment and the misconduct involved in the litigation defense of the resulting patent claims. On appeal, we have relied on a more limited set of wrongful conduct than recited in the district court's opinion, see *supra* nn.4-5, but we do not think that the equitable balance is altered by that narrowing. The conduct we have affirmed as wrongful is so clearly the core of the district court's analysis that we have no doubt that the equitable balancing by the district court would have been the same if it had limited its wrongful-conduct findings to those we have recited. On these facts, there is no abuse of discretion.

As the district court recognized, the question for the '712 patent is closer, but we also see no abuse of discretion in the district court's ultimate conclusion that the unclean hands defense extends to that patent as well. The district court connected the '712 patent to one portion of Merck's improper conduct: once Dr. Durette improperly learned PSI-6130's structure through participating in the March 2004 call at Merck's behest, Merck kept him in his patent-prosecution role—which, as noted, included filing the 2007 application that issued as the '712 patent, as well as the initial substitute claims, after the (tainted) '499 patent had already issued. *Id.* at *10-11. While the district court said that its "finding of improper business conduct related to the March 2004 call was not considered by the Court in determining whether unclean

hands prevented enforcement of the '712 Patent," *id.* at *36 n.5, that statement does not refer to the retention of Dr. Durette as the lead prosecutor of HCV applications, including the one that eventually issued as the '712 patent, and the court relied on that improper retention. *E.g.*, *id.* at *10-11. The district court relied on the connection between the two patents: "Dr. Durette played a key role in the prosecution of both the '499 and '712 Patents. He was responsible for filing the application that eventually matured as the '712 Patent and this application shares the same specification as the '499 Patent." *Id.* at *36.

More importantly, the district court, turning from the business misconduct to the litigation misconduct, reasonably concluded that "Merck's litigation misconduct infects the entire lawsuit, including the enforceability of the '712 Patent." *Id.* at *32. "[T]he untruthful testimony offered by Dr. Durette in his deposition and at trial was not incidental, but rather was directed at and supported Merck's validity arguments, and went to the heart of significant issues in this case." *Id.* The validity issues were largely the same for the two patents, focused on the common specification of the two patents and how that specification bore on written-description support for and enablement of claims in the two patents that have closely related scope. As indicated above, the jury verdict form tied both of those issues, for both patents, to the question of "derivation from Jeremy Clark" (the Pharmasset inventor of PSI-6130, disclosed in March 2004 and published in the Clark Application). J.A. 21066-75. Thus, the litigation misconduct "infected this entire case, covering both patents-in-suit." *Gilead*, 2016 WL 3143943, at *36. We conclude that, contrary to Merck's suggestion, the

district court set forth a sufficient explanation of the '712 patent's connection to Merck's misconduct.

Merck argues that even where there is misconduct related to one patent, "that does not defeat claims under another patent simply because they were 'brought . . . in the same lawsuit.'" Merck Br. 69. We agree; but the assertion does not undermine the district court's ruling here. The Supreme Court's decisions in *Keystone* and *Precision Instruments*, dealing with findings of unclean hands when multiple patents were at issue in the litigation and the alleged misconduct related to a subset of the patents, are instructive. In both cases, the Supreme Court applied the finding of unclean hands to all of the patents. *Keystone*, 290 U.S. at 246-47; *Precision Instruments*, 324 U.S. at 819. The district court in the present case had sufficient reason to find that both patents were tainted by the patentee's misconduct, especially the litigation misconduct. Thus, we see no abuse of discretion with respect to either the '499 patent or the '712 patent.

III

Because the district court did not abuse its discretion in applying the doctrine of unclean hands, we affirm.

Costs awarded to Gilead.

AFFIRMED

APPENDIX B
UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

NO. 13-CV-04057-BLF

GILEAD SCIENCES, INC.,
Plaintiff,

v.

MERCK & CO, INC., *et al.*,
Defendants.

ORDER REGARDING NON-JURY LEGAL ISSUES
[Re: ECF 407, 411]

Decided: June 6, 2016

Plaintiff Gilead Sciences, Inc. ("Gilead") seeks to bar Defendants Merck & Co., Merck Sharp and Dohme Corp., and Isis Pharmaceuticals, Inc., (collectively "Merck") from maintaining their suit based on the equitable defenses of waiver and unclean hands. At trial, the jury determined that Merck's patents-in-suit are not invalid and awarded damages to Merck for infringement. Gilead's equitable defenses, however, are the province of the Court to decide.

After a thorough review of the evidence submitted at trial and in post-trial submissions, the Court finds Gilead

has not shown that Merck waived its right to enforce the '499 and '712 Patents against Gilead. The record, however, reflects a pervasive pattern of misconduct by Merck and its agents constituting unclean hands, which renders Merck's '499 and '712 Patents unenforceable against Gilead.

I. BACKGROUND

On December 6, 2013, Gilead received approval from the Food and Drug Administration to market and sell Sovaldi®, an orally-administered prescription drug containing the active ingredient sofosbuvir, to treat chronic Hepatitis C (HCV) infection in patients. Order Construing Claims at 2, ECF 140. Sofosbuvir is a prodrug that is inactive and has little to no therapeutic effect until transformed by enzymes in the body into an active form. *Id.* Once inside a liver cell sofosbuvir is converted into three analogs, each with different structures: a monophosphate analog, a diphosphate analog, and a triphosphate analog. *Id.* The triphosphate analog is the therapeutically effective form that can target and cure HCV infection in patients. *Id.*

Merck asserts that two of its patents, U.S. Patent No. 7,105,499 and U.S. Patent No. 8,481,712, cover sofosbuvir, and that Gilead's sales of Sovaldi® and Harvoni®, which contain the active ingredient sofosbuvir, induce and contribute to the infringement of these patents. Merck Mot. for SJ, ECF 167. The operative filing date of the '499 and '712 Patents is January 18, 2002. Exh. 22 to Gilead Mot. for SJ at Interrog. No. 1, ECF 164-16.

The '712 Patent is directed to compounds having a specific structural formula, Exh. 16 to Gilead Mot. for SJ at 143:1-146:60, ECF 165-11, while the '499 Patent relates to methods for treating HCV by administering a therapeutically effective amount of those compounds either

alone or in combination with another HCV treatment. Exh. 1 to Gilead Mot. for SJ at 137:1-138:25 (claims 1 and 2).

At summary judgment, Gilead argued that the asserted claims were invalid but conceded that if they were not invalid, it infringed them. The Court denied Gilead's summary judgment motion of invalidity and granted Merck summary judgment of infringement. ECF 214. On March 20, 2016, after an eight-day trial, the jury found that the '499 and '712 Patents were not invalid. Following a three-day trial on damages, the jury awarded Merck $200 million in damages for sales of Sovaldi® and Harvoni® through December 31, 2015. Verdict Phase 2, ECF 392. On March 30, 2016, the Court held a bench trial on Gilead's equitable defenses of unclean hands and waiver. ECF 401. On April 22, 2016, Gilead filed a motion to re-open the record and allow additional evidence. ECF 410. On April 29, 2016, the Court held a hearing on Gilead's motion where the Court granted the motion and also allowed Merck to supplement the record. ECF 418.

II. LEGAL STANDARD

Federal Rule of Civil Procedure 52(a) requires district courts to make findings of fact in an action "tried on the facts without a jury or with an advisory jury." Fed. R. Civ. P. 52(a)(1). The Court is required to "find facts specially and state its conclusions of law separately." *Id.* "One purpose behind Rule 52(a) is to aid the appellate court's understanding of the bases of the trial court's decision." *Simeonoff* v. *Hener*, 249 F.3d 883, 891 (9th Cir. 2001) (internal citations omitted). The Court is not required to make findings on each and every fact presented at trial. *Id.* Conflicting testimony must be resolved on

relevant issues. *Zivkovic* v. *Southern California Edison, Co.*, 302 F.3d 1080, 1090 (9th Cir. 2002).

III. FINDINGS OF FACT

Gilead argues that Merck waived its rights to enforce the '499 and '712 Patents, or alternatively, that these patents are unenforceable by virtue of the doctrine of unclean hands. Gilead Trial Br., ECF 368; Gilead Supp. Trial Br., ECF 408. Gilead claims Merck impliedly waived its patent rights by attempting to license or acquire from Pharmasset, Gilead's predecessor-in-interest, its confidential compound, PSI-6130 from 2003 to 2011. Gilead Trial Br. 8-9, ECF 368. Next, Gilead argues Merck's unclean hands bars enforcement of the patents against it because Merck improperly obtained the structure of PSI-6130 from Pharmasset, drafted patent claims covering PSI-6130, and then lied about its conduct during this proceeding. Gilead Trial Br. 2-8, ECF 368. Merck responds that it never explicitly or implicitly indicated that it would not enforce the '499 and '712 Patents against Gilead. Merck Tr. Br. 5-6, ECF 370. Merck also argues the jury's rejection of Gilead's invalidity defense forecloses Gilead's unclean hands defense and even if it did not, Merck's actions do not warrant a finding of unclean hands. Merck Trial Br. 1-6, ECF 370; Merck Supp. Trial Br., ECF 409. With that brief overview of the parties' arguments, the Court makes the following findings of fact and conclusions of law.[1]

A. The Parties

1. Plaintiff Gilead Sciences, Inc. ("Plaintiff" or "Gilead") and Defendants Merck & Co., Inc. ("Merck & Co."),

[1] To the extent that any conclusion of law is deemed to be a finding of fact, it is adopted as such; and likewise, any finding of fact that is deemed to be a conclusion of law is so adopted.

Merck Sharp & Dohme Corp. ("MSD Corp."), and Ionis Pharmaceuticals, Inc., formerly known as Isis Pharmaceuticals, Inc. ("Ionis" or "Isis"), (collectively, "Defendants" or "Merck") are the parties in this action. Compl., ECF 1.

2. Gilead is a company organized and existing under the laws of the State of Delaware with its principal place of business at 333 Lakeside Drive, Foster City, California 94404. Compl. ¶2, ECF 1.

3. Merck & Co. is a company organized under the laws of the State of New Jersey with its principal place of business at One Merck Drive, P.O. Box 100, Whitehouse Station, NJ 08889-0100. Compl. ¶3, ECF 1; Ans. ¶3, ECF 62.

4. MSD Corp. is a company organized under the laws of the State of New Jersey with its principal place of business at One Merck Drive, P.O. Box 100, Whitehouse Station, NJ 08889-0100. Compl. ¶4, ECF 1; Ans. ¶4, ECF 62.

5. MSD Corp. is a subsidiary of Merck & Co. Compl. ¶5, ECF 1; Ans. ¶5, ECF 62.

6. Ionis is a company organized under the laws of the State of Delaware with its principal place of business at 2855 Gazelle Court, Carlsbad, CA 92010. Compl. ¶6, ECF 1; Ans. ¶6, ECF 62.

B. General Background of the Litigation

7. The patents-in-suit are U.S. Patent Nos. 7,105,499 (the "'499 Patent") and 8,481,712 (the "'712 Patent"). Compl. ¶¶62-77, ECF 1. On August 30, 2013, Gilead filed its complaint for declaratory judgment of non-infringement and invalidity of the '499 and '712 Patents. Compl. ¶1, ECF 1.

8. On November 22, 2013, Merck filed its answer and amended counterclaims. Ans., ECF 62. Merck denied all allegations involving non-infringement and invalidity, *id.* at ¶¶66-77, and counterclaimed for a declaratory judgment of infringement of the '499 and '712 Patents, *id.* at ¶¶11-34.

9. On November 28, 2014, Merck filed its second amended and supplemental counterclaims. Second Am. Countercl., ECF 98. Merck repeated its previous counterclaims seeking declaratory judgment of infringement of the '499 and '712 Patents, and added additional counterclaims for infringement of the '499 and '712 Patents based on the fact that Gilead began commercially selling sofosbuvir on or about December 6, 2013. *Id.* at 1 n.1.

10. On December 15, 2014, Gilead filed its answer to Merck's second amended and supplemental counterclaims. Ans. to Second Am. Countercl., ECF 101. Gilead denied all pertinent allegations regarding infringement and invalidity, *id.* at ¶¶11-43, and asserted affirmative defenses based on invalidity, laches, estoppel, waiver, and unclean hands, *id.* at 6.

11. Merck moved for summary judgment that Gilead's products (Sovaldi® and Harvoni®) that contain the active pharmaceutical ingredient "sofosbuvir" infringe the asserted claims. Merck's Mot. for SJ, ECF 167. Gilead argued that the asserted patents are invalid but conceded that if they are not invalid, then it infringes the asserted claims. Gilead's Opp. to SJ at 1, ECF 175. On February 1, 2016, the Court granted as unopposed Merck's motion for summary judgment that the sale by Gilead of Sovaldi® and Harvoni® infringes the asserted claims. Summary Judgment Order at 8, ECF 214. The Court left to a jury trial the issue of whether the asserted patents are invalid. *Id.* at 9.

12. At trial, Merck asserted claims 1 and 2 of the '499 Patent and claims 1, 2, 3, 5, 7, 9, 10 and 11 of the '712 Patent. Joint Pretrial Stmt. at 3, ECF 254.

13. From March 7-16, 2016, the Court held an eight-day jury trial on Gilead's invalidity defenses under 35 U.S.C. § 112 (lack of written description and enablement) and § 102 (derivation and prior invention). ECF 305, 306, 307, 324, 325, 327, 348, 349.

14. On March 22, 2016, the jury reached a verdict, finding the '499 and '712 Patents were not invalid. Verdict Phase 1, ECF 388. Following a three day trial on damages, ECF 386, 389, 391, the jury awarded Merck $200 million in damages for sales of Sovaldi® and Harvoni® through December 31, 2015. Verdict Phase 2, ECF 392.

15. On March 30, 2016, the Court held a bench trial on Gilead's equitable defenses. ECF 401. Prior to the bench trial, on March 22, 2016, Gilead withdrew its defenses of laches and equitable estoppel. Gilead Trial Br. at 1 n.1, ECF 368. As a result, the March 30 bench trial addressed Gilead's defenses of unclean hands and waiver. Gilead Trial Br., ECF 368; Merck Trial Br., ECF 370.

16. On April 22, 2016, Gilead filed a motion to re-open the record and allow additional evidence. ECF 410. On April 29, 2016, the Court held a hearing on Gilead's motion where the Court granted the motion and also allowed Merck to supplement the record. ECF 418.

C. Background on Hepatitis C

17. HCV was discovered in the late 1980s. Trial Tr. 191:14-17 (McHutchison). Around 170 million people in the world and 3.2 to 3.5 million people in the United States have HCV. Trial Tr. 197:22-198:1 (McHutchison).

18. HCV is a blood borne disease. Trial Tr. at 195:19-196:16 (McHutchison). Prior to 1991, blood donations were not screened for HCV and people contracted HCV through blood transfusions. *Id.* Today, HCV is spread in other ways including the sharing of a needle or a used razor. *Id.* When a person is infected with HCV, the virus attacks and invades the liver. *Id.* Damaged liver cells are replaced with scar tissue, eventually resulting in cirrhosis and potentially causing liver cancer and requiring a liver transplant. *Id.*

19. There are seven strains, or genotypes of the HCV virus. Trial Tr. 198:2-199:2 (McHutchison). In the United States, the most common type of strain is genotype 1 (affecting between 67 and 75% of infected people) followed by genotype 2 and 3. *Id.*

20. Historically, individuals with HCV genotype 1 were treated with interferon or a combination of interferon and ribavirin. Trial Tr. 199:6-17 (McHutchison). Initially such treatment consisted of three interferon injections a week for one year and subsequently improved to one injection a week with ribavirin pills twice a day. *Id.* Side effects from this treatment resembled the flu and included fevers, chills, shakes, burning muscles, and headaches. Trial Tr. 200:6-18 (McHutchison).

21. Because of the side effects, on average, 20 percent of individuals would not participate in the treatment and 20 percent of people who started the treatment could not complete it. Trial Tr. 199:18-25; 200:19-201:1 (McHutchison). Moreover, of those who successfully completed the treatment, only about 40 percent were actually cured. *Id.*

22. In the 1990s and 2000s, significant efforts were made by various individuals and entities to find improved treatment options for HCV. See, *e.g.*, Trial Tr. 201:2-4 (McHutchison) (researched HCV treatment at Scripps

Clinic and Duke University); Trial Tr. 209:15-211:13 (McHutchison) (explaining Gilead's attempts to treat HCV); Trial Tr. 254:14-255:8 (Sofia) (discussing collaboration between Roche and Pharmasset); Trial Tr. 491:19-493:1 (Otto) (explaining Pharmasset's research regarding HCV in the early 2000s); Trial Tr. 949:18-23 (Olsen) (discussing joint collaboration between Merck and Isis to research HCV treatments).

23. HCV is particularly difficult to treat for at least a few different reasons. Trial Tr. 197:4-21 (McHutchison). HCV has developed several different ways to evade the immune system and is constantly replicating. *Id.* For example, once infected, a person may have a trillion viruses in their body with half of those viruses being replaced every three to five hours. *Id.* In addition, drugs that may be effective against HCV in a laboratory setting may be unsuitable for humans due to toxic side effects. Trial Tr. 249:3-17 (Sofia). Even when a drug that is effective against HCV is discovered, it must still be delivered to the virus and liver without being converted into an inactive drug by the body. Trial Tr. 249:18-250:9 (Sofia).

D. The '499 and '712 Patents

24. Merck and Isis are joint assignees of the '499 and '712 Patents. Joint Pretrial Stmt. at 2, ECF 254.

25. The patents share a common specification, Stipulation, ECF 300; Trial Tr. 1787:20-24 (stipulation), and arose out of a joint collaboration between Merck and Isis dating from 1998-2003, Trial Tr. 961:10-17; 994:25-995:3 (Olsen). The purpose of the collaboration was to find nucleoside inhibitors of HCV RNA replication by targeting the NS5B polymerase. Trial Tr. 949:18-23 (Olsen).

26. Merck employees Dr. David Olsen, a research scientist, Trial Tr. 920:22-24 (Olsen), and Steve Carroll, an

enzymologist, were some of the people that led the Merck-Isis collaboration, Trial Tr. 948:19-949:12 (Olsen).

27. As part of that years-long collaboration, the Merck-Isis scientists tested more than 2,000 nucleoside analogs, of which at least 1,000 were novel compounds made by Isis. Trial Tr. 970:21-971:2 (Olsen). The group's work was guided in part by its analysis of structure activity relationships, which it used to identify compounds that were likely to be active. Trial Tr. 963:4-12 (Olsen). The inventors tested the compounds of the invention using an NS5B polymerase biochemical assay and a cell-based replicon assay. Trial Tr. 948:15-949:7, 969:21-970:11 (Olsen); 1561:7-15 (Wuest). The assays were performed in 96-well plates to test many compounds at one time. Trial Tr. 948:15-949:7, 1013:9-1014:1 (Olsen).

28. Philippe Durette, an in-house patent prosecutor at Merck, became involved with the Merck-Isis collaboration in late 2000. Trial Tr. 991:10-16 (Olsen). Dr. Durette has a bachelor's degree from Marquette University and a Ph.D. from The Ohio State University. Trial Tr. 412:14-15 (Durette). Dr. Durette did a post-doctoral fellowship for three years and afterwards started his career as a medicinal organic chemist at Merck. Trial Tr. 412:18-413:5 (Durette). After 25 years working in laboratory settings, Dr. Durette went to law school at Rutgers University and subsequently passed the bar exams in New Jersey and Pennsylvania in 1993 and 1994. Trial Tr. 413:4-13 (Durette).

29. On January 22, 2001, Dr. Durette filed U.S. Provisional Application No. 60/263,313. EX-0804. Subsequently, Dr. Durette filed additional provisional applications in April, June, and October of 2001. EX-0805, 0806, 0807.

30. The patent applications included over 150 examples depicting compounds of the invention. Trial Tr. 928:24-929:1 (Olsen).

31. On January 18, 2002, Dr. Durette filed two nonprovisional patent applications having the same specification, one of which was the PCT application that led to the '499 Patent. EX-0808, 0829. These applications incorporated the provisional patent applications by reference. Trial Tr. 1587:22-1588:13 (Wuest).

32. Dr. Olsen, Dr. Carroll, Dr. Durette, and various team members were involved in drafting the 2002 patent application that eventually resulted in the '499 and '712 Patents. Trial Tr. 990:11-991:4 (Olsen).

33. On July 9, 2003, Dr. Durette filed U.S. Patent Application No. 10/258,873 (the "'499 application"), the specific application that resulted in the '499 Patent. EX-0829. It claims priority to the January 18, 2002, nonprovisional patent application. EX-0001.

34. Upon initially filing the '499 application, Dr. Durette submitted a preliminary amendment presenting ten claims for prosecution. EX-0829.0247-0259. Among the ten claims for prosecution was claim 44. *Id.* Pending claim 44 covered the use of a compound from among structural formula III as defined within the claim to treat HCV. EX-0829.0257-0258. The generic structural formula III as defined in pending claim 44 was identical to a sub-embodiment of structural formula III in the specification. Compare *id.* with EX-0001.0009. That sub-embodiment of structural formula III is limited to only single-ring, or pyrimidine, bases. *Id.* Pending claim 44 containing generic structural formula III never issued as a patent claim.

35. Between July 9, 2003 and February 7, 2005, no substantive actions took place with respect to the '499 application. EX-8029.0001-1092. However, Dr. Durette did not forget about the '499 application as he exchanged correspondence with the Patent Office in 2003 and 2004:

a. On October 14, 2003, Dr. Durette submitted an information disclosure statement that disclosed related applications 10/052,318 and 10/431,657. EX-8029.1070-76.

b. On December 4, 2003, the Patent Office issued a notice that that the '499 application was missing an oath or declaration of the inventors in compliance with 37 CFR 1.497(a) and corresponding fees. EX-8029.1077-78.

c. On January 16, 2004, Dr. Durette responded to the notice by enclosing a declaration and power of attorney executed by the inventors and the appropriate fees. EX-8029.1080-88.

d. On February 11, 2004, the Patent Office issued a notice of acceptance for examination that the application complied with all the requirements of 35 U.S.C. § 371. EX-8029.1091-92.

E. The Beginning of the Pharmasset and Merck Conversations

36. During the early 2000s, Pharmasset was a research-based pharmaceutical company focused in the field of nucleoside derivatives as potential antiviral treatments, including treatments for HCV. Trial Tr. 489:21-490:3; 491:23-492:6 (Otto).

37. In 2001, Pharmasset and Merck explored potential collaboration opportunities. Trial Tr. 1019:21-1020:2 (Olsen). In order to facilitate discussions, on January 29,

2001, Pharmasset entered into a Non-Disclosure Agreement ("NDA") with Merck. EX-2298.

38. The purpose of the NDA was to permit disclosure of "certain confidential and proprietary information concerning discovery and development of antiviral agents against flaviviruses, in particular hepatitis C virus (HCV)" for the purpose of "evaluating a possible business relationship between the Parties." EX-2298.0002.

39. Under the NDA, Merck agreed to hold the confidential information disclosed to it by Pharmasset in confidence and not to disclose any confidential information to any third party without the prior written authorization of Pharmasset. EX-2298.0003, ¶5.

40. Under the NDA, Merck agreed that it would not use Pharmasset's confidential information for any purpose other than for evaluating a potential collaboration with Pharmasset. EX-2298.0003, ¶6.

41. On August 22, 2003, Pharmasset and Merck amended their NDA, again for purposes of evaluating a potential collaboration. EX-1241.0001. The August 22, 2003, Amendment stated that all terms and conditions of the January 29, 2001, Non-Disclosure Agreement would remain in full force and effect. *Id.*

42. One month later, on September 22, 2003, Pharmasset presented to Merck an overview of its HCV program. EX-2300.

43. The presentation focused on Pharmasset's evaluation of its compound identified as PSI-6130 in both the replicon assay and the HCV NS5B polymerase assay. EX-2300.0002. PSI-6130 was first recorded by Pharmasset employee Jeremy Clark on December 6, 2002. EX-2383 at 32:11-32:17, 33:05-33:14, 34:10-34:14, 36:04-36:16, 36:24-37:12.

44. During the presentation, Pharmasset also presented to Merck data on the potency of PSI-6130 in the NS5B polymerase assay. EX-2300.0014, 0017, 0019.

45. Thus, by September 22, 2003, Merck was aware that Pharmasset's lead compound, PSI-6130, was an NS5B polymerase inhibitor whose mechanism of action was to inhibit the NS5B polymerase enzyme.

46. On October 23, 2003, Pharmasset and Merck executed a Material Transfer Agreement ("MTA") authorizing Merck to conduct testing and evaluation of ten Pharmasset nucleosides, including PSI-6130. EX-1231.0002, .0006. The MTA referred to the "Evaluation of Pharmasset HCV NS5B Nucleoside Inhibitor." EX-1231.0012.

47. Under the MTA, Merck agreed to limit its use of the disclosed nucleoside compounds to testing and evaluation as set forth in the Agreement. EX-1231.0007. The MTA also barred Merck from determining the chemical structure of the nucleosides provided for testing. *Id.*

48. On December 12, 2003, Pharmasset and Merck amended their MTA to include further evaluation of PSI-6130 as an HCV inhibitor. EX-1231.0003. The amendment described PSI-6130 as "a Nucleoside HCV NS5B Inhibitor" and as "the HCV NS5B polymerase inhibitor." EX-1231.0004.

49. Under the terms of these additional material transfer agreements, Merck knew that Pharmasset's PSI-6130 was an NS5B polymerase inhibitor. *Id.*

50. In January 2004, Merck tested PSI-6130 and told Pharmasset that the in vitro results were "very encouraging." EX-2302.0002. Moreover, Merck requested certain information about the structure of PSI-6130. EX-2302.0003; EX-0183.0001.

51. Maintenance of confidentiality was critically important to Pharmasset. A confidential compound's structural information is a biopharmaceutical company's "crown jewels." EX-2400 at 166:19-168:7; see also EX-2397 at 22:9-20.

52. Dr. Durette admitted that "[h]aving structural information is very important as to what the competition is doing in its research efforts." Durette Dep. Tr. (EX-2388) at 38:25-39:7; Trial Tr. at 359:15-18 (Durette).

53. In furtherance of the Pharmasset-Merck discussions, Merck proposed that structural information be shared with a "firewalled" Merck medicinal chemist, Dr. Wallace Ashton, to "help guide [Merck] in framing a relationship with Pharmasset in the HCV field." EX-2302.0003; EX-0183.0001.

54. In an effort to encourage Pharmasset to give Merck structural information about PSI-6130, Merck told Pharmasset that "[i]t will be very helpful to Merck if Pharmasset would consider allowing a Merck Medicinal Chemist, who is 'firewalled' from our internal HCV program, assess the lead and back-up Pharmasset compounds." EX-2302.0003.

55. A firewall is a key method to protect a confidential compound's structural information, because it limits that confidential information to only individuals not involved with the project at hand, therefore maintaining confidentiality. EX-2400 at 166:19-168:7.

56. Merck understood that the purpose of the firewall was to protect Pharmasset's confidential structural information about its lead compound, PSI-6130. EX-2302.0003; see also EX-2397 at 24:08-24:11, 24:14-16.

57. Pharmasset only agreed to provide more information about the structure of PSI-6130 to Merck person-

nel who were within the firewall (i.e., "firewalled"). EX-2302.0001-.0002.

58. A firewalled person would not have any involvement with Merck's internal HCV program. EX-2302.0001.

59. Thus, Pharmasset was willing to provide structural information about PSI-6130 to Merck because there was a confidentiality agreement in place between the parties and the information would be firewalled. EX-2302.0001.

60. On February 4, 2004, Pharmasset provided information to firewalled Merck chemist, Dr. Wallace Ashton, disclosing that PSI-6130 was a cytosine base containing nucleoside, without a N=O bond, and with a 5' hydroxyl group. EX-0046.001; EX-0047.0001-2.

61. In communicating that structural information, Pharmasset reminded Dr. Ashton that the information was only being shared with him because he was firewalled. EX-0047.0001.

62. Dr. Ashton understood that, as a firewalled chemist receiving structural information about PSI-6130, he was not permitted to communicate specifics of the compound's structure to anyone outside the firewall. EX-2397 at 24:8-26:4, 34:8-12.

63. Despite the NDA, MTA and firewall restrictions, in March 2004, Merck directed Dr. Durette, one of its in-house patent attorneys, to participate in a due diligence call with Pharmasset. Trial Tr. at 355:22-360:15 (Durette); EX-0153.

64. As discussed *supra* Findings of Fact ("FOF") ¶¶28-29, since 2001, Dr. Durette had been the attorney responsible for prosecuting patent applications related to nucleoside analogs for the treatment of HCV based on the Merck-Isis HCV collaboration, including the '499 ap-

plication. Trial Tr. at 328:21-24 (Durette). These patent applications disclosed NS5B polymerase inhibitors. EX-0001; EX-0808.

65. On March 11, 2004, one month after the Patent Office issued the '499 application's notice of acceptance for examination, Dr. Durette was copied on an e-mail from Pamela Demain, a Merck corporate licensing specialist, regarding the upcoming March 17, 2004, due diligence call with Pharmasset. Trial Tr. 356:20-357:10 (Durette). The other recipients of this e-mail were Mervyn Turner, Anthony Ford-Hutchinson, Barbara Yanni, Malcolm Maccoss, Daria Hazuda, David Olsen, Scott Kauffman, Doug Pon, Frank Potter, Michael Rabinowitz, Durga Bobba, and Linda Stefany. The e-mail evidences Merck's intention that Dr. Durette would participate in the due diligence call.

66. In that March 11, 2004, e-mail, Ms. Demain noted that "Pharmasset has not yet permitted us to review the structure of PSI-6130." EX-0153.0001.

67. In that March 11, 2004, e-mail, Ms. Demain wrote "[a]s a first step, Phil Durette will view the structure during a patent due diligence meeting on March 17[, 2004]." EX-0153.0001.

68. Ms. Demain's March 11, 2004, e-mail attached a proposed Merck-Pharmasset term sheet. She stated in the e-mail that the term sheet had been reviewed by Dr. Durette. Trial Tr. at 2499:1-2500:1 (Demain); EX-0153.0001.

69. The proposed term sheet that Dr. Durette reviewed stated that Pharmasset's "lead compound PSI 6130 . . . is a chain terminator of HCV polymerase." EX-2394.0002; Trial Tr. at 2500:5-21 (Demain).

70. A chain terminator of HCV polymerase is the same type of compound for which Dr. Durette was prosecuting patent applications for Merck, and the same type of compounds which were the subject of the Merck-Isis collaboration. Trial Tr. at 951:12-955:21 (Olsen) (describing collaboration as focused on chain terminators).

71. From his review of the term sheet and Ms. Demain's email, Dr. Durette knew, before the March 17, 2004, patent due diligence phone call with Pharmasset, that:

a. PSI-6130 was Pharmasset's lead compound, EX-0153.0001; EX-2394.0002; Trial Tr. at 1430:9-18 (Demain);

b. Pharmasset believed PSI-6130's value was "in excess of $100 million total," EX-153.0001;

c. he would learn the structure of PSI-6130 during the March 17, 2004 phone call, EX-0153.0001;

d. PSI-6130 was a chain terminator of the HCV polymerase, Trial Tr. at 2500:17-2501:4 (Demain); EX-2394.0002; and

e. PSI-6130 was an NS5B polymerase inhibitor, Trial Tr. at 2500:17-2501:4 (Demain); EX-2394.0002.

72. In light of the facts recited *supra* FOF ¶¶ 64-70, the Court finds that Dr. Durette knew, before the March 17, 2004, phone call, that any information he learned about Pharmasset's PSI-6130 nucleoside analog compound would overlap with the subject matter of his patent prosecution docket for Merck, thereby creating a conflict. Trial Tr. at 354:14-355:16; 364:11-365:11, 375:7-23 (Durette).

73. Furthermore, Dr. Durette did not qualify as a firewalled individual; he was prosecuting patents from

the Merck-Isis collaboration. See, *e.g.*, Trial Tr. 990:11-991:4 (Olsen).

74. Merck's corporate policy forbids Merck's patent prosecutors from participating in licensing discussions in an area related to their prosecution work. Durette Dep. Tr. (EX-2388) at 38:25-39:7.

75. Dr. Durette knew, before the March 17, 2004, due diligence phone call with Pharmasset, that learning the structure of PSI-6130 would overlap with his responsibilities in prosecuting patent applications concerning the Merck-Isis collaboration, including the '499 application and violate corporate policy.

76. Thus, in light of the facts recited *supra* FOF ¶¶ 64-75, the Court finds that it was improper for Merck to plan to have its employee Dr. Durette participate on the March 17, 2004, due diligence call with Pharmasset.

F. The Phone Call

77. On March 17, 2004, a due diligence phone call was held between Merck and Pharmasset. EX-2098.

78. The Merck participants on the March 17, 2004, phone call were Dr. Durette and Dr. Pon. *Id.* The Pharmasset participants on the March 17, 2004, phone call were Alan Roemer, Dr. Raymond Schinazi, and Bryce Roberts. *Id.*

79. This March 17, 2004, phone call occurred barely one month after Dr. Durette received the '499 application's notice of acceptance for examination. Trial Tr. 354:24-355:16 (Durette).

80. Mr. Roemer took notes during the call. EX-2098.

81. During the March 17, 2004, call, Dr. Durette learned the structure of PSI-6130. Trial Tr. at 431:7-14 (Roemer); Trial Tr. at 347:9-22 (Durette); EX-2098.

82. At the beginning of the call, Dr. Schinazi reminded everyone that it was a firewalled conversation. Trial. Tr. at 382:8-12 (Durette); EX-2098.0001 (RFS: "Firewall"). This meant that no one from Merck on the telephone call should have been involved in Merck's HCV program. EX-2302.0003.

83. Before Pharmasset revealed the structure of PSI-6130, Dr. Durette did not tell Pharmasset that he was prosecuting patents in the same field of HCV nucleoside analogs. Trial Tr. at 435:7-12 (Roemer); EX-2098; Trial. Tr. at 382:8-383:6 (Durette).

84. Merck violated its own company policy by directing Dr. Durette to participate in the due diligence phone call with Pharmasset. Durette Dep. Tr. (EX-2388) at 38:25-39:7.

85. Mr. Roemer's notes reflect that after initial information about the structure of PSI-6130 was disclosed, Dr. Durette stated that the information he learned "seems quite related to things that I'm involved with," and that he "need[ed] to have a conversation with his supervisor." EX-2098.0002. Moreover, according to Mr. Roemer's notes, Dr. Durette clarified that he was "personally conflicted; not the company." EX-2098.

86. At the end of the call, Mr. Roemer again reminded the Merck attendees that this was a firewalled conversation, and sought confirmation that Dr. Durette and Dr. Pon were within the "firewall" of the Confidentiality Agreement. Trial Tr. 382:8-18 (Durette); Trial Tr. at 434:1-24 (Roemer); EX-2098.0002.

87. At the end of the call, both Dr. Durette and Dr. Pon specifically stated that each of them was within the firewall. Trial Tr. at 434:1-20 (Roemer); EX-2098.0002.

88. After the March 17, 2004, call, neither Merck nor Dr. Durette ever informed Pharmasset that Dr. Durette was not in fact firewalled and was in fact prosecuting Merck's patents in the same field.

89. At his deposition, Dr. Durette testified that if he had learned the structure of PSI-6130, then according to Merck's procedures and policies, he would have had to turn his prosecution of Merck's HCV patents over to another attorney. Durette Dep. Tr. at 201:23-202:16, ECF 410-3.

90. Instead of withdrawing from prosecution, Dr. Durette continued to prosecute Merck's HCV patent applications and write new claims that targeted Pharmasset's work. The new claims that targeted Pharmasset's work were based on the information he learned on the March 17, 2004, patent due diligence call.

91. The Court finds that:

a. Dr. Durette's statements to Pharmasset on the March 17, 2004, call about being within the firewall were untrue;

b. Merck, through Dr. Durette and Dr. Pon, knowingly misrepresented to Pharmasset that Dr. Durette was firewalled;

c. it was a violation of the Merck-Pharmasset firewall for Dr. Durette to participate on the March 17, 2004, call;

d. it was improper for Merck and Dr. Durette never to have informed Pharmasset that Dr. Durette was not within the firewall and was in fact prosecuting Merck's patents in the same field;

e. after Dr. Durette learned the structure of PSI-6130 on the March 17, 2004, phone call, Merck was required to recuse Dr. Durette from any further

prosecution of the Merck-Isis patent applications, in order to comply with Merck's obligations under the NDA, EX-2298, EX-0124, and the firewall; and

f. Merck and Dr. Durette's failure to recuse Dr. Durette from further prosecution of the Merck-Isis patent applications was an improper business practice.

92. Neither Merck nor Dr. Durette has provided any explanation for why Dr. Durette was not excluded from further prosecution of the Merck-Isis patent applications after learning the structure of PSI-6130 during the firewalled patent due diligence call.

G. Dr. Durette's Continued Prosecution of the '499 and '712 Patents

93. On the March 17, 2004, patent due diligence call, Dr. Durette was told by Pharmasset that Pharmasset's patent application would be publishing in November 2004. EX-2098.0002.

94. Pharmasset's patent application naming Jeremy Clark as the inventor and disclosing the structure of PSI-6130 published on January 13, 2005. EX-0155.

95. As of February 1, 2005, the Patent Office had not allowed the then-pending claims of the '499 application. EX-0829.

96. On February 1, 2005, Dr. Durette cancelled all then-pending claims of the '499 application and submitted the two new, narrower claims (53 and 54) for prosecution. EX-0156.0004.

97. None of the listed inventors on the '499 Patent was involved in Dr. Durette's patent claiming strategy or the change in claims that took place on February 1, 2005. Bhat Dep. Tr. (EX-2377) at 100:11-17; Eldrup Dep. Tr. (EX-2378) at 55:24-56:6; Carroll Dep. Tr. (EX-2379) at

129:1-10; Cook Dep. Tr. (EX-2376) at 255:11-15; Olsen Dep. Tr. (EX-2380) at 213:18-21. This is despite the fact that several Merck-Isis team members had been involved with drafting the initial application. Trial Tr. 990:11-991:4 (Olsen) (explaining Dr. Olsen, Dr. Carroll, Dr. Durette, and various team members were involved in drafting the 2002 patent application that eventually resulted in the '499 and '712 Patents).

98. The then-pending claims had not been rejected by the patent examiner at the Patent Office, and the examiner had not asked Dr. Durette to narrow the claims. See EX-8029. Dr. Durette did that on his own. Trial Tr. at 372:18-23 (Durette).

99. The two new, narrower claims Dr. Durette submitted on February 1, 2005, do not cover any compound tested by Merck and Isis during the Merck-Isis collaboration. Stipulation, ECF 300; Trial Tr. 554:6-10 (stipulation).

100. The two narrowed claims issued as claims 1 and 2 of the '499 Patent. EX-0156.0004; see also EX-0001.0071.

101. Dr. Durette waited until Pharmasset published the structure of PSI-6130 and then wrote claims to cover Pharmasset's invention. Trial Tr. at 369:24-374:4, 389:25-390:14; 417:1-19 (Durette).

102. The Court finds that Dr. Durette waited to amend the claims in the '499 Patent until Clark application was published to give the appearance that he learned it from a public source.

103. Dr. Durette has admitted that he would not have been able to associate any structure in the Pharmasset application as the structure of PSI-6130 unless he knew the structure of PSI-6130 beforehand. Durette Dep. Tr. at 53:1-6, 53:22-54:5, ECF 410-3.

104. The Court finds that Dr. Durette would not have written new claims to cover PSI-6130 in February 2005 but for his improper participation on the March 17, 2004 patent due diligence call and learning the structure of PSI-6130 ahead of the structure being published.

105. Additionally, in further violation of Merck's corporate policy and the Merck-Pharmasset firewall, it was improper for Merck to allow Dr. Durette to prosecute the '712 Patent after having participated on the March 17, 2004, call and learning the structure of PSI-6130. Dr. Durette filed the application that resulted in the '712 Patent in February 2007. EX-2375 (Bergman Dep. Tr.) at 26:16-24, 27:03-06; EX-0192.0003.

106. The '499 and '712 Patents share a common specification. Stipulation, ECF 300; Trial Tr. 1787:20-24 (stipulation).

H. Dr. Durette's Deposition

107. Dr. Durette was deposed in this case on May 8, 2015. Durette Dep. Tr. at 1, ECF 410-3.

108. Dr. Durette was Merck's designated Fed. R. Civ. P. 30(b)(6) corporate representative on issues related to the preparation and prosecution of the patent application leading to the '499 patent-in-suit, including all reasons for amending any pending claim during prosecution. Durette Dep. Tr. at 181:25-182:16, ECF 410-3.

109. At the deposition, Dr. Durette was represented by Merck's outside counsel. Durette Dep. Tr. at 7:16-19, ECF 410-3.

110. Leading up to his deposition, Dr. Durette met with Merck's outside and inside counsel for two full days of preparation, six to seven hours for each day. Durette Dep. Tr. at 10:19-11:11, ECF 410-3.

111. Dr. Durette spent an additional 8-10 hours on his own preparing for the deposition. *Id.*

112. Dr. Durette testified at his deposition that he had the same memory of events before and after looking at documents related to the Merck HCV program. Durette Dep. Tr. at 14:8-15:11, ECF 410-3.

113. During the deposition, Dr. Durette was questioned about his participation in the March 17, 2004, patent due diligence call. Durette Dep. Tr. (EX-2388) at 30:21:31:10.

114. When asked about the March 17, 2004, call at the deposition, Dr. Durette denied ever having been on such a call. When asked whether he was sure that he was not on the March 17, 2004, call, Dr. Durette unequivocally answered yes.

> Q: . . . In March of 2004 were you involved in any discussion with Pharmasset whereby you were told what the structure was for their 6130 compound?
>
> A: No.
>
> Q: You're sure of that?
>
> A: Yes.
>
> Durette Dep. Tr. (EX-2388) at 30:21-31:3.

115. Dr. Durette also stated that he was "positive" that the structure of PSI-6130 was "never" revealed to him:

> Q: How are you so sure 11 years later that you were never told what the structure was for the 6130 compound?
>
> A: The structure was not revealed to me by individuals at Merck or otherwise. I'm positive of that. I never saw a structure of the Pharmasset compounds until it published later on in time.

Durette Dep. Tr. (EX-2388) at 31:4-31:10.

116. Dr. Durette did not say that he did not remember a call or that he could not be sure, but definitively stated that he was sure he was never on the call and "positive" that he never saw the structure of PSI-6130 prior to it being published later. *Id.*

117. Later in the deposition, Dr. Durette also definitively stated that "I never participated in a due diligence meeting on March 17 because the due diligence component of this potential deal was assigned to another attorney, so there was—I did not participate in any meeting of due diligence on March 17." Durette Dep. Tr. (EX-2388) at 37:13-18.

118. Dr. Durette offered several reasons why he never learned the structure of PSI-6130 in March 2004.

> Q: How can you be so sure of that memory?
>
> A: Because I was not part of the patent due diligence for the structure, so I would not have been privy to any revelation of the structure to me as a patent attorney working on a related docket. So this was assigned to another person. So I would not have participated in a phone call wherein it was a potential for the revelation of the structure to Merck counsel.
>
> Q: Why would that have been inappropriate for you to have been told the structure of 6130?
>
> A: Because I was prosecuting a docket which had potential a conflict with Pharmasset's IP positions on the subject matter.

Durette Dep. Tr. (EX-2388) at 38:1-38:13.

119. Dr. Durette acknowledged at his deposition that it was against Merck's company policy to have a Merck pa-

tent prosecutor participate in licensing discussions in a related area. Durette Dep. Tr. (EX-2388) at 38:25-39:07.

120. Dr. Durette explained at his deposition "[h]aving structural information is very important as to what the competition is doing in its research efforts. We had a policy at Merck on a particular docket area if there were potential licensing opportunities in a related area, that due diligence would be assigned to a non—an attorney that was not prosecuting a particular docket in a related area." Durette Dep. Tr. (EX-2388) at 38:25-39:7.

121. Dr. Durette acknowledged at the deposition that learning the structure of PSI-6130 would "have tainted [his] judgment as to what claims to pursue in the Merck/Isis collaboration." Durette Dep. Tr. (EX-2388) at 38:21-38:24.

122. Pharmasset's patent application, known as the Clark application, published on January 13, 2005. EX-0155. When Pharmasset's patent application published on January 13, 2005, it disclosed a "large collection of compounds." Durette Dep. Tr. at 52:25, ECF 419-1. In Dr. Durette's words, PSI-6130 was but one structure among a "plethora of compounds" disclosed in the patent application. Durette Dep. Tr. at 53:25-54:1, ECF 419-1.

123. Without knowing the structure of PSI-6130 in advance of the application, Dr. Durette would not have been able to associate any compound in the patent application published on January 13, 2005, with PSI-6130. Durette Dep. Tr. at 52:19-23, ECF 419-1.

> Q: How is it that you know that you would not in January of 2005 have realized that Paragraph 0168, that chemical structure there, was 6130?
>
> A: Because this was one compound out of a plethora of compounds in the publication.

> Q: Now, if you had been told prior to this publication what the structure of 6130 was, then you would have been able to match it up, right?
>
> A: Yes.

Durette Dep. Tr. at 53:25-54:5, ECF 410-3.

124. Having denied being on the March 17, 2004, due diligence call, Dr. Durette was shown Ms. Demain's March 11, 2004 e-mail which said that he was specifically chosen by Merck to receive the structure of PSI-6130 on a March 17, 2004, patent due diligence call. Durette Dep. Tr. (EX-2388) at 37:02-18; EX-0153. He was asked if this refreshed his recollection. Durette Dep. Tr. (EX-2388) at 37:02-18.

125. In the face of Ms. Demain's e-mail, Dr. Durette still denied being on the call, contending "[t]hat was Pamela's evaluation of the time, but I never participated in a due diligence meeting on March 17 because the due diligence component of this potential deal was assigned to another attorney, so there was—I did not participate in any meeting of due diligence on March 17." Durette Dep. Tr. (EX-2388) at 37:13-18.

126. Dr. Durette was then shown a May 20, 2004, letter and asked if that letter refreshed his recollection about the March 17, 2004, call. Durette Dep. Tr. at 168:5-16, ECF 410-3. The May 20, 2004, letter contained a list of things Pharmasset wanted returned, including "notes from a March 17, 2004, telephone conference regarding PSI-6130 patent due diligence with [Doug Pon] and Phil Durette." *Id.*

127. Dr. Durette still denied being on the call, stating that it was his sworn testimony that he was not made aware of the structure of PSI-6130 on the March 17,

2004, call, and that he remembered that clearly. Durette Dep. Tr. at 168:24-169:18, ECF 410-3.

128. At the time of his deposition, no one told Dr. Durette that Pharmasset's Alan Roemer had taken contemporaneous notes of that March 17, 2004, patent due diligence phone call. Trial Tr. at 380:22-25 (Durette).

129. Mr. Roemer was deposed by Merck's counsel on May 24, 2015. Roemer Dep. Tr. at 1.

130. At Mr. Roemer's deposition, his notes were used as an exhibit, and Gilead's counsel asked Mr. Roemer about the call that occurred on March 17, 2004. Mr. Roemer testified that Dr. Durette participated in the call and that Dr. Durette was provided the structure of PSI-6130 on that call. Roemer Dep. Tr. at 233:3-22.

131. Between May 24, 2015, the date of Mr. Roemer's deposition, and March 8, 2016, the start of trial, Merck never indicated that Dr. Durette's deposition testimony was untruthful or incorrect.

132. In his opening statement at trial, on March 8, 2016, Merck's counsel stated that Merck would not dispute that Dr. Durette was on the March 17, 2004, call with Pharmasset. Trial Tr. at 178:5-179:1 (Merck's opening statement). Counsel for Merck further told the jury that Dr. Durette did not know that the compound that Pharmasset was going to disclose was within the scope of what Merck was working on. Trial Tr. 178:8-11 (Merck's opening statement). That representation of Dr. Durette's pre-call knowledge was incorrect. See *infra*, FOF ¶¶ 142-143.

133. Gilead first learned of Dr. Durette's new story during Dr. Durette's examination at trial.

I. Dr. Durette's Trial Testimony

134. Dr. Durette was outside the subpoena power of this Court and Gilead could not force his attendance at trial. Final Pretrial Conf. Tr. at 42:5-17, ECF 280. Merck, knowing about Dr. Durette's deposition testimony, voluntarily brought Dr. Durette to trial to testify on its behalf.

135. At trial, Dr. Durette provided key testimony for Merck on validity issues, including written description of the '499 Patent. Trial Tr. 391:10-404:19 (Durette). For example, Dr. Durette testified that his amendment to the '499 Patent "was fully supported by the specification," Trial Tr. 403:15-17 (Durette), and that "[Merck] had support for written—written description support in terms of how to make the[structure] and how to use them." Trial Tr. 410:11-15 (Durette).

136. At trial, Dr. Durette said that his memory of the March 17, 2004, patent due diligence call became refreshed in January 2016 when he reviewed the deposition exhibits in preparation for trial. Trial Tr. at 386:6-15 (Durette).

137. When confronted with his deposition testimony that he had not participated in the Pharmasset-Merck due diligence call, Dr. Durette said he was relying too much on his memory. Trial Tr. at 344:8-17 (Durette).

138. Dr. Durette attempted to explain away his deposition testimony by stating that he had a lapse in memory and "over concluded" based on his memory. Trial Tr. at 344:18-345:7, 347:9-348:1 (Durette).

139. When asked about the March 17, 2004, call at trial, Dr. Durette said that the answers he gave at the deposition were "based on my lack of recollection of the events and I over concluded that I had—that I had not

seen the structure." Trial Tr. at 344:1-345:7, 347:9-22 (Durette).

140. Dr. Durette further testified at trial that Pamela Demain, Merck's director of corporate licensing, asked him to attend the March 17, 2004, call. Trial Tr. at 355:17:23, 375:12-19 (Durette).

141. Ms. Demain credibly testified that she did not ask Dr. Durette to attend the call. Trial Tr. at 1404:14-1405:8 (Demain). Instead, Ms. Demain explained she was simply acting as a messenger when she sent her March 11, 2004, e-mail and she did not know who asked Dr. Durette to be on that call. Trial Tr. at 1405:1-8 (Demain). The Court concludes that Dr. Durette's testimony was not credible on this point.

142. Dr. Durette also asserted at trial that before the due diligence call, while he knew PSI-6130 was a nucleoside, he did not know that PSI-6130 was an inhibitor of the NS5B polymerase. Trial Tr. at 364:13-18, 365:13-21, 367:13-368:6 (Durette).

143. Contrary to that testimony, Ms. Demain credibly testified that Merck and Dr. Durette did know that PSI-6130 was a nucleoside NS5B polymerase inhibitor. Trial Tr. at 2498:2-4, 2499:1-2501:4 (Demain); EX-0153; EX-2394. The Court concludes that Dr. Durette's testimony was not credible on this point.

144. Dr. Durette stated at trial that he went into the March 17, 2004, call knowing that he would receive the structure of PSI-6130 but he "did not think it was going to be likely that it would be on the subject matter that was related to the—my HCV docket." Trial Tr. at 350:25-351:9 (Durette).

145. Contrary to that testimony, Dr. Durette was prosecuting patents directed to nucleoside NS5B poly-

merase inhibitors, Trial Tr. at 367:13-23 (Durette), and he knew going into the call that PSI-6130 was a nucleoside NS5B polymerase inhibitor. EX-0001.0001; EX-0808; EX-2394.0002; Trial Tr. at 2498:2-4, 2499:1-2501:4 (Demain). Again, the Court concludes that Dr. Durette's testimony was not credible on this point.

146. At trial, Dr. Durette for the first time said that he had had a pre-call meeting with his manager and they had determined that it was fine for him to learn the structure of PSI-6130 because Dr. Durette was prosecuting patents related to nucleosides with a certain mechanism of action, NS5B polymerase inhibitors. Trial Tr. at 360:16-361:21 (Durette); see also Trial Tr. at 365:13-21, 367:13-368:14 (Durette). Specifically, Dr. Durette testified that his manager and he decided it was fine for Dr. Durette to learn the structure of PSI-6130 for several reasons: (1) HCV has "many different target enzymes"; (2) nucleosides for HCV is a "very broad area"; (3) nucleosides that attack different enzymes can have "totally different structures" and different "structure types" with "different overall mechanisms of action." *Id.* Dr. Durette offered no explanation for this sudden clear memory.

147. Contrary to that testimony, Merck, and Dr. Durette in particular, knew before the meeting that PSI-6130 was a nucleoside NS5B inhibitor with the same mechanism of action of the compounds for which he was seeking patent protection on behalf of Merck and Isis. EX-2300; EX-1231; EX-0153; EX-2394; EX-0090; Trial Tr. at 2498:2-4, 2500:5-2501:4 (Demain). Ms. Demain credibly testified that Dr. Durette knew this fact. Trial Tr. at 2500:5-2501:4 (Demain). The term sheet attached to the e-mail from Ms. Demain, which Dr. Durette reviewed, states that: "Until then, this amount [of the pro-

posed license] is based on the following assumptions: . . . That lead compound PSI-6130 . . . is a chain terminator of HCV polymerase . . . ." EX-2394.0002. The Court concludes that Dr. Durette's testimony was not credible on this point.

J. Clark Publication

148. Pharmasset's patent application, known as the Clark application, published on January 13, 2005. EX-0155.

149. When Pharmasset's patent application published on January 13, 2005, PSI-6130 was but one structure among a number of structures disclosed in the patent application. EX-0155.

150. At trial, Dr. Durette said that seeing the Clark application in 2005 caused him to think that any confidentiality obligations he had under the NDA had terminated. Trial Tr. at 369:24-370:14 (Durette).

151. Contrary to that testimony, at his deposition, Dr. Durette testified that he had no memory of when he saw Pharmasset's published patent application, and that in any event, he never associated that application with the structure of PSI-6130. Durette Dep. Tr. at 48:15-20, 51:25-52:1, ECF 410-3.

152. In fact, at his deposition, Dr. Durette—who was Merck's corporate representative with respect to the February 1, 2005 claim amendment—testified that he was not sure if he saw the Clark publication before the February 1, 2005 claim amendment:

> Q: You're just not sure if you saw the Clark publication before February 1, 2005?
>
> A: Correct.

Durette Dep. Tr. at 67:22-24, ECF 410-3; see also *id.* at 65:14-67:24, ECF 410-3.

153. At trial, Dr. Durette said that seeing the Pharmasset patent application must have been a triggering event that led him to reexamine his docket and look at the '499 Patent application. Trial Tr. at 390:23-391:9 (Durette).

154. Contrary to that testimony, at his deposition, Dr. Durette further testified that Pharmasset's application would have had no impact, even if he had seen the application, on his amendment of Merck's claims. Durette Dep. Tr. at 71:11-72:3.12, ECF 410-3.

155. Dr. Durette also testified at his deposition that he would not have realized that the structure disclosed in paragraph 0168 of the Pharmasset application was PSI-6130 because it was just "one compound out of a plethora of compounds." Durette Dep. Tr. at 53:22-54:5, ECF 410-3.

156. Dr. Durette further testified at his deposition that he never associated the published Clark chemical structure with PSI-6130. Durette Dep. Tr. at 52:19-23, 53:1-6, ECF 419-1.

157. Dr. Durette acknowledged at his deposition that if had he been told the structure of PSI-6130 prior to the patent publication, then he would have been able to match up PSI-6130 to the structure disclosed at paragraph 0168. Durette Dep. Tr. at 54:2-5, ECF 410-3. However, at his deposition, Dr. Durette testified he was not sure he even saw the Clerk publication before February 1, 2005. Durette Dep. Tr. at 65:14-67:24, ECF 410-3.

K. Amendment of the Claims

158. Dr. Durette canceled all pending claims in the '499 Patent application in February 2005 and drafted two

new claims to cover PSI-6130. Trial Tr. 375:24-376:10 (Durette). The Court finds that he did so because he had learned the structure of PSI-6130 on the March 17, 2004, call.

159. At deposition, Dr. Durette testified that he was not sure he saw the Clark publication prior to amending the claims. Durette Dep. Tr. 48:10-52:1, ECF 410-3. Given the timing of his amendment, mere days after the Clark publication, and his contradictory and evasive testimony at trial, the Court finds Dr. Durette's deposition testimony is not credible.

160. At his deposition and on cross examination at trial, Dr. Durette insisted that he filed the two, narrower claims in the '499 application simply to "expedite" prosecution. Trial Tr. at 374:7-375:2 (Durette).

161. At trial, on direct examination by Merck's counsel, Dr. Durette stated that he amended the '499 claims to focus on "get[ting] allowance on the subject matter that was most important to the [Merck-Isis] collaboration." Trial Tr. at 404:14-19 (Durette).

162. Dr. Durette's changing and evasive explanations for why he narrowed the claims undermine his testimony. The Court finds his testimony to be not credible.

163. Additionally, Dr. Durette's claim that he amended the '499 claims to focus on "get[ting] allowance on the subject matter that was most important to the [Merck-Isis] collaboration" is contrary to the evidence and is not credible because Merck never tested any of the claimed compounds. Stipulation, ECF 300; Trial Tr. 554:6-10 (stipulation).

164. Neither Merck nor Isis tested a single compound falling within the new claims of the '499 Patent during

the Merck-Isis collaboration that ended in 2003. Stipulation, ECF 300; Trial Tr. 554:6-10 (stipulation).

165. Merck did not test a single compound claimed in the '499 Patent until August 2005, after Jeremy Clark's patent application published, and after Dr. Durette added the two new claims to the '499 Patent. Trial Tr. at 576:1-22 (Seeger); Stipulation, ECF 300; Trial Tr. 554:6-10 (stipulation).

166. Neither Merck nor Isis made a 2'-methyl up, 2'-fluoro down pyrimidine or purine nucleoside compound, tested such a compound, or used such a compound during the Merck-Isis collaboration that ended in 2003. Bennett Dep. Tr. (EX-2381) at 123:15-124:01, 124:06-21; Duffy Dep. Tr. (EX-2382) at 46:22-25; Trial Tr. at 576:1-22 (Seeger); Stipulation, ECF 300; Trial Tr. 554:6-10 (stipulation).

167. The Court finds that it is not credible that compounds that were never made, used, or tested during a collaboration were considered by Merck to be the most important work of the collaboration.

168. The only 2'-methyl up, 2'-fluoro down compound proposed by Merck and Isis was never made, does not fall within the claims of the '499 Patent, and was a "lower priority." Song Dep. Tr. (EX-2385) at 175:16-21, 177:1-5, 178:4-9, 189:10-18; see also Trial Tr. at 736:8-17 (Secrist); Trial Tr. at 982:9-17, 983:9-984:20 (Olsen); EX-0036.0056; EX-1543.0003; Bennet Dep. Tr. (EX-2381) at 111:2-10, 123:9-12, 124:6-9.

169. Merck did not make a 2'-methyl up, 2'-fluoro down purine or pyrimidine compound until August 2005, seven months after Mr. Clark's patent application published, and six months after Dr. Durette filed new patent claims

to cover such compounds in February 2005. Trial Tr. at 1130:12-17; Duffy Dep. Tr. (EX-2382) at 46:22-25.

170. The Court finds Dr. Durette's testimony that the two new, narrower claims he wrote in the '499 Patent were to protect Merck's "most important work" is not credible and is false.[2]

L. The '712 Patent

171. The '712 Patent was filed on February 2, 2007 as U.S. Patent Application No. 11/701,682 (the "'712 application") by Dr. Durette. EX-0002.0001; EX-0192.0003; Bergman Dep. Tr. (EX-2375) at 25:5-27:6.

172. While Mr. Jeffrey Bergman, Merck's in-house patent attorney, took over prosecution of the '712 Patent application in 2011, Dr. Durette was involved in prosecuting the application prior to that. Bergman Dep. Tr. (EX-2398.0001) at 17:1-7, 17:25-18:7.

173. Merck asserted both the '499 and '712 Patents in this action and Dr. Durette was Merck's 30(b)(6) witness on the prosecution of the '499 Patent, which shares the same specification as the '799 Patent. Durette Dep. Tr. 181:25-182:16, ECF 410-3.

M. Waiver

174. Merck and Pharmasset had discussions in 2003-2004 about the possibility of Merck in-licensing Pharmasset's lead compound PSI-6130. Trial Tr. 1402:6-24 (Demain). Merck scientists were interested in PSI-6130 because they believed that combination therapy was the

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[2] Although Gilead introduced evidence of Dr. Durette's work on a related patent application, the '224 Patent application, the Court did not consider it in assessing Merck's misconduct. There are various legitimate reasons why a patentee may choose to abandon a pending application and the fact that Merck and Dr. Durette chose to abandon the prosecution of the '224 Patent application is not relevant.

future of HCV treatment and that PSI-6130, if successful, might be used with Merck's own MK-0608 compound and other anti-HCV drugs. Trial Tr. 1056:25-1058:2 (Olsen).

175. There is no evidence that Merck communicated to Pharmasset that Merck was waiving its patent rights during the 2004 timeframe. And no one from Pharmasset ever communicated to Merck that it believed Merck waived its patent rights. Trial Tr. 2482:2-18 (Demain). Nothing Merck did could be construed as a waiver of patent rights in 2004.

176. Beginning in 2008 through 2011, there were several years of on-again, off-again negotiations between Merck and Pharmasset over partnering opportunities in the antiviral space including in the HIV, Hepatitis B, and Hepatitis C areas. Trial Tr. 1405:16-1406:11 (Demain). On numerous occasions, Pharmasset contacted Merck to see if Merck was interested in a deal. *Id.*; see also Trial Tr. 1407:5-1408:15 (Demain); EX-1675 (timeline of Merck-Pharmasset discussions).

177. In the 2008 period, the driver of discussions was Pharmasset's Hepatitis B drug Clevudine in late-stage clinical studies. Trial Tr. 1405:16-1406:11 (Demain). In October 2008, Merck offered to license Clevudine along with Pharmasset's anti-HCV program, or alternatively, to purchase Pharmasset for $625 million. EX-1768; EX-0093 at 1-2. In its letter, Merck pointed out that one advantage of Merck acquiring Pharmasset would be that Pharmasset would get "[t]he ability to leverage Merck's intellectual property estate to reduce uncertainty and enhance the value of the Pharmasset assets going forward." EX-1768 at 2; EX-0093 at 2. Merck conveyed to Pharmasset that Pharmasset would benefit by no longer having to concern itself with the risk associated with

Merck's blocking patents. Trial Tr. 1409:17-1411:1 (Demain); Trial Tr. 2483:16-2484:19 (Demain).

178. Ms. Demain testified without contradiction that Merck's patents were always in the background of the discussions with Pharmasset. Trial Tr. 2482:2-11 (Demain). Ms. Demain dealt primarily with Pharmasset's head of licensing, Abel De la Rosa. Trial Tr. 2482:19-21 (Demain). The two discussed Merck's patents generally, but there was no ambiguity that one of the patents at issue was the '499 Patent series. Trial Tr. 2482:22-2483:2; 2520:21-2521:14 (Demain) (explaining that "there's no ambiguity" about which patents were discussed with Dr. De la Rosa "because there were two patents, and it was very clear what we were speaking about"). No Pharmasset witness testified to having any other understanding of these discussions. Ms. Demain conveyed to Pharmasset that there was unique value in Pharmasset partnering with Merck because Pharmasset would gain access to Merck's patents. Trial Tr. 2521:2-8 (Demain).

179. The documents corroborate Ms. Demain's account. On October 8, 2009, in an internal memorandum, Pharmasset stated that "[a]ll things considered, Merck is the ideal strategic partner for PSI-7851 [sofosbuvir] and Pharmasset. Consolidating nucleos(t)ide IP would lower the legal risk of this program." EX-1770 at 2 (emphasis added), App'x at 35.

180. Beginning around October 2009, and carrying through to August 2010, Pharmasset and Merck exchanged draft term sheets that would make Merck a development and marketing partner of sofosbuvir for which Merck would pay Pharmasset, and in which Pharmasset would get a cross-license to Merck's patents. EX-1622 (October 2009); EX-1625 (December 2009 draft); EX-

1630 (April 2010 draft); EX-2390 (July 2010 draft); EX-1652 (referencing forthcoming August 2010 draft); Trial Tr. 2484:20-2487:14 (Demain) (discussing draft term sheets).

181. In December 2009, Pharmasset sent a draft term sheet to Merck which provided that Merck would grant Pharmasset a co-exclusive, worldwide license under Merck's patents with respect to the licensed compound, which was sofosbuvir. EX-1625 at 2; Trial Tr. 2486:9-20 (Demain).

182. In April 2010, Pharmasset sent a term sheet to Merck that provided for a similar license to Merck's patents. EX-1630; Trial Tr. 2486:25-2487:14 (Demain). Although these term sheets did not specifically mention the '499 and '712 Patents by name, the parties contemplated that Pharmasset would get a license to all of Merck's patents in this space. Trial Tr. 1412:16-1413:17 (Demain) (explaining that Pharmasset was looking to license "all of the patents related to HCV that Merck had"). At the time of these term sheet exchanges in late 2009 and 2010, the '499 Patent had issued and the application that led to the '712 Patent was pending with the Patent Office. EX-0001; EX-0002. And although the term sheets discussed were general in nature and did not list out the particular Merck patents that would have been licensed to Pharmasset, a final agreement would provide an appendix listing the licensed patents and patent applications. Trial Tr. 2507:18-24 (Demain).

183. Consistent with Pharmasset's repeated requests, a May 25, 2010, internal Merck presentation about the Pharmasset term sheet indicated that Pharmasset had requested a "[n]on-exclusive, worldwide license under Merck patent rights and know how to develop, manufacture and commercialize products containing Licensed

Compound [which included PSI-7977, Pharmasset's compound number for sofosbuvir]." EX-1634 at 3; Trial Tr. 2487:18-2489:3 (Demain).

184. On June 16, 2010, Merck sent Pharmasset a counter-proposal that did not include a license from Merck to Pharmasset that would provide Pharmasset freedom-to-operate with regard to Pharmasset's HCV products. EX-1636; Trial Tr. 1413:18-1414:7 (Demain) (explaining Pharmasset's proposed license was too broad and that Merck "took it out of the term sheet").

185. On August 5, 2010, Pharmasset wrote Merck in advance of sending a revised term sheet that once again sought a license to Merck's patent estate. The letter noted that "[t]he licensing of Merck Patent Rights and Know-How is specific to the development, manufacture and commercialization of PSI-7977 as a Monotherapy Product, or as the PSI-7977 component of Pharmasset Combination Products." EX-1652. While most of the term sheets exchanged during this period did not provide for a royalty to Merck, "there was one version that did have royalties going back to Merck." EX-1625 at 7; Trial Tr. 2506:23-2507:1 (Demain).

186. Around September 2010, Merck's interest in a deal changed from a collaboration to a purchase. On September 3, 2010, Merck again sent a letter that stated that one of the benefits to Pharmasset of an acquisition by Merck would include "'[t]he ability to leverage Merck's intellectual property estate to reduce uncertainty and enhance the value of the Pharmasset assets going forward.'" EX-0069; EX-0686 at 1-2; Trial Tr. 1414:14-1415:10 (Demain). Merck ultimately did not purchase Pharmasset.

187. In 2011, Merck executives informed Pharmasset's CEO, P. Schaefer Price, that Pharmasset needed a li-

cense from Merck to the '499 Patent to commercialize PSI-7977 (sofosbuvir). Merck indicated that "there were claims [of the '499 Patent] that could give Pharmasset trouble in the future." Mr. Price responded that he hoped Merck's attorney could "find the courthouse." Price Depo Tr. (EX-2392) at 115:13-116:06. This course of events is entirely inconsistent with a waiver of patent rights and demonstrates that Pharmasset did not hold any belief—much less a reasonable one—that Merck had waived its patent rights.

188. The May 2011 Merck-Roche license, to which Pharmasset consented, is also inconsistent with a waiver. When Merck did not do a deal with Pharmasset for PSI-6130 in 2004, Pharmasset ultimately did a deal with Roche. EX-0627; Trial Tr. 1415:19-1416:4 (Demain). In 2011, when PSI-6130 was in phase II clinical studies and appeared as though it would advance to the next stage of development, Roche approached Merck for an unblocking license so that Merck's patents would not stand in the way of Roche bringing PSI-6130 (then renamed RG-7128) to the market. Trial Tr. 1416:9-23 (Demain). Pharmasset remained the development partner of that product with Roche. Trial Tr. 1417:14-20 (Demain). There is no evidence that Pharmasset ever conveyed to Roche that it thought that Merck was not going to enforce its patents against them.

189. In 2011, Roche (Pharmasset's development partner with regard to certain nucleosides including PSI-6130) entered into a license agreement with Merck, whereby Merck granted Roche a license to the '499 Patent (and other to-be-issued patents including the application that issued as the '712 Patent) and Roche agreed (among other things) to pay Merck a royalty of between 9-12%. EX-1783; Trial Tr. 1416:24-1417:7 (Demain).

190. Under Roche's development agreement with Pharmasset, Pharmasset's consent to the Roche-Merck license was sought because Roche's royalty payments to Merck would reduce Roche's royalty payments to Pharmasset. EX-0627 at 2; Trial Tr. 1417:18-1418:2 (Demain).

191. By September 7, 2011, Pharmasset had consented to the Roche-Merck license. EX-2632. Pharmasset was informed that Pharmasset's consent to the Merck-Roche license would cause the Merck-Roche license to spring into effect. EX-0619; Trial Tr. 1419:18-1423:1 (Demain). There is no evidence that Pharmasset ever told Roche that Merck would not assert its patents.

192. During the 2008 to 2011 timeframe, there is no evidence that anyone from Merck communicated to Pharmasset that Merck would not assert its patents. No one from Pharmasset ever communicated to Merck that Pharmasset thought Merck waived its patent rights. Trial Tr. 2482:2-18 (Demain).

193. In February 2, 2011, Merck prepared an internal business analysis that compared two scenarios: one in which Merck would provide a license to Roche to develop product R-7128 and another in which Merck would buy Pharmasset and develop sofosbuvir. Trial Tr. 2514:11-2516:25 (Demain). The '499 patents are listed as intellectual property considerations for the Roche license deal, but not for the Pharmasset sofosbuvir purchase deal. EX-0099 at 27, 29. But Ms. Demain explained this difference: in the first scenario (in which Roche would have to pay for a license to Merck's patents), Merck was not contemplating a purchase of Roche; in the second scenario, in which Merck would buy Pharmasset, Merck's patents would no longer be a concern for sofosbuvir—the only concern would be third-party patents. Trial Tr. 2516:3-25 (Demain) (explaining why Merck's patents were listed on

the R-7128 slide, but not the PSI-7977 slide). Ms. Demain's testimony was not contradicted at trial and in any event, there is no indication that this document or any other like it was ever communicated to Pharmasset before this litigation commenced.

194. Merck had no viable patent infringement claim until Pharmasset/Gilead's product was on the market. Trial Tr. 2483:3-7 (Demain). Given that Merck could not sue for infringement until late 2013 because Gilead's pre-commercialization work is specifically exempted from constituting infringement under the "FDA exemption," no ripe claim existed until then, and it would not be reasonable to conclude that Merck waived its patent rights before Gilead commercialized. Indeed, the '712 Patent did not issue until the summer of 2013. EX-0002. Shortly thereafter, and before Gilead's product was launched, Merck sent a letter to Gilead asking Gilead to take a license. EX-2566.

195. Furthermore, a defense of waiver cannot be asserted based on any interaction between Merck and Pharmasset in 2004 because Merck's '499 patent did not issue until September 12, 2006. EX-0001.

196. Gilead Response to Merck's Interrogatory No. 11 (asking for the factual and legal basis for Gilead's defense that Merck's claims are barred by the equitable doctrine of laches and/or estoppel and/or waiver) does not point to any specific communications between Merck and Pharmasset, nor does Gilead's response specify any document that indicates Merck has waived its right to assert the '499 and '712 Patents against Gilead. Gilead's Written Discovery Responses 4-5, ECF 231-25.

197. Gilead's Interrogatory response points only to EX-2314 as alleged evidence that Merck delayed assertion of its patent rights was misleading to Gilead or that

Gilead has suffered material prejudice. Gilead's Written Discovery Responses 4-5, ECF 231-25. This reliance is misplaced: EX-2314 is a letter from Merck to Pharmasset dated September 3, 2010 regarding the *licensing proposal provided to Merck by Pharmasset*. The letter rejects the licensing proposal and rather suggests the alternative that Merck acquire Pharmasset.

198. Contrary to Gilead's assertion, EX-2314 specifically put Pharmasset on notice that Merck would assert its patent rights. In describing the benefits to Pharmasset and its shareholders in an acquisition of Pharmasset by Merck, the letter states that one of the benefits is "[t]he ability to leverage Merck's intellectual property estate *to reduce uncertainty and enhance the value of the Pharmasset assets* going forward." EX-2314 at 2 (emphasis added). The very document cited by Gilead shows that Merck communicated to Pharmasset that Merck's intellectual property estate was a source of uncertainty for Pharmasset.

199. No witnesses from either Pharmasset or Gilead testified that they reasonably believed that Merck would not assert its patents.

IV. CONCLUSIONS OF LAW—WAIVER

Courts have recognized waiver as a defense to patent infringement. *Qualcomm Inc.* v. *Broadcom Corp.*, 548 F.3d 1004, 1019 (Fed. Cir. 2008). There are two forms of waiver—"true waiver" and "implied waiver." *Id* at 1020. True waiver occurs when a patentee "with full knowledge of the material facts, intentionally relinquished its rights to enforce [the asserted patents]." *Id.* Implied waiver occurs when a patentee's "conduct was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such right has been relinquished." *Hynix*

Semiconductor Inc. v. *Rambus Inc.*, 645 F.3d 1336, 1348 (Fed. Cir. 2011); *Qualcomm*, 548 F.3d at 1020.

In this case, Gilead does not contend that there was a true waiver of Merck's patent rights and instead argues Merck impliedly waived its patent rights. See Gilead Trial Br. 11-12, ECF 368. However, most courts finding an implied waiver of patents rights have done so in the context of standard setting organizations where (1) the patentee had a duty of disclosure to the standard setting organization and (2) the patentee breached that duty. *Barnes & Noble*, 849 F. Supp. 2d at 941-42 (citing *Hynix*, 645 F.3d at 1348); see also *Qualcomm Inc.* v. *Broadcom Corp.*, 2007 WL 1031373, at *6-23 (S.D. Cal. Mar. 21, 2007), aff'd 548 F.3d at 1020-22.

Gilead has cited three cases for the proposition that implied waiver is not limited to standard setting organizations. In *Mars, Inc.* v. *TruRX LLC*, the Eastern District of Texas discussed the Federal Circuit's decision in *Qualcomm*, which dealt with implied waiver in the standard setting context. Case No. 6:13-cv-526-RWS, ECF 346, at *2-3 (E.D. Tex. April 29, 2016). The Court found that "nothing in the [Federal Circuit's] opinion indicated that implied waiver can only be established if a patentee is under a duty to disclose information to a standard setting organization" and noted that "the [Federal Circuit] simply held that under the particular facts of the case, the district court did not abuse its discretion by concluding that Qualcomm's 'conduct was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such right ha[d] been relinquished.'" *Id.* at *2. What mattered to the court was not whether a standard setting organization was implicated, but rather whether the patent holder's silence or inaction was so inconsistent with an intent to enforce its rights as to induce a reason-

able belief that the patent holder had relinquished its rights.

In *Universal Electronics Inc.* v. *Logitech, Inc.*, the Central District of California stated that "implied waiver as a doctrine does not need to be limited to" the context of a standard setting organization. Case. No. 11-cv-01056-JVS(ANx), ECF 144, at *21 (C.D. Cal. May 9, 2012). However, the court went on to recognize that it was aware of "no law dictating that silence outside of the [standard setting organization] context is 'so inconsistent' with intent to enforce" that it could constitute an implied waiver. *Id.* at *22. The court further recognized that "other courts" had "impos[ed] significant barriers to establish a duty to disclose in the [standard setting organization] context." *Id.*

In *Dane Technologies, Inc.* v. *Gatekeeper Systems, Inc.*, the final case relied upon by Gilead, the District of Minnesota appeared to assume that implied waiver is a valid defense outside the context of standard setting organizations. Case No. 12-cv-2730-ADM/JJK, 2015 WL 5719142, at *19 (D. Minn. Sept. 29, 2015). However, the court only cited cases involving standard setting organizations, and it did not analyze whether implied waiver could apply outside that context—it simply assumed so. *Id.*

While some courts have recognized implied waiver of patent rights outside the standard setting context, it is not clear that Federal Circuit caselaw dictates such a result. Assuming that implied waiver is a cognizable defense outside the standard setting context, Gilead has failed to meet its burden of proof. On that note, it is also unclear whether the burden of proof for asserting waiver is preponderance of the evidence or clear and convincing evidence. See, *e.g. Hynix*, 645 F.3d 1348 ("To support a

finding of implied waiver in the standard setting organization context, the accused must show by clear and convincing evidence . . .") (quoting *Qualcomm*, 548 F.3d at 1020); *A.C. Aukerman Co.* v. *R.L. Chaides Construction Co.*, 960 F.2d 1020, 1045-46 (Fed. Cir. 1992) (en banc) (holding that the quantum of proof for equitable estoppel is a preponderance of the evidence except where "special considerations" are implicated, such as "where the danger of deception is present . . . , where a particular claim is disfavored on policy grounds . . . , or where a particularly important individual interest is at stake such as one's reputation . . . ."); *Oracle Am., Inc.* v. *Google Inc.*, Case No. 10-cv-03561 WHA, 2012 WL 1965778, at *2 (N.D. Cal. May 31, 2012) ("To prevail on a waiver defense, Google must show by a preponderance of the evidence . . ."). For purposes of this case, the Court need not decide the issue as Gilead has failed to prove implied waiver by either standard of proof.

Implied waiver requires proof that the patentee's conduct "was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such right has been relinquished." *Hynix*, 645 F.3d at 1348 (quoting *Qualcomm*, 548 F.3d at 1020)); see also Pretrial Conference Statement 5, ECF 254 (stipulation that waiver requires "a reasonable belief that [a] right has been relinquished"). Gilead has failed to make such a showing for at least three reasons:

First, Gilead failed to establish that it or Pharmasset reasonably believed that Merck had relinquished its patent rights. Gilead did not offer any evidence to show such a belief. In fact, the only evidence of what Pharmasset or Gilead believed supports a conclusion that they did not believe Merck had relinquished its rights. See

supra, FOF ¶¶179, 187. This failure of proof alone compels a conclusion that implied waiver has not been shown.

Second, even if Gilead had offered evidence tending to show that Pharmasset or Gilead believed Merck had relinquished its right to assert the patents in suit, any such belief would have been unreasonable because Merck's conduct was not inconsistent with an intent to enforce its rights. From 2008 to 2011, the parties engaged in repeated discussions over partnership opportunities in the antiviral space. During such discussions, Pharmasset proposed term sheets to Merck which provided that Merck would grant Pharmasset a worldwide license to Merck's patents. In one counter-proposal, Merck sent an offer that did not provide Pharmasset with a freedom-to-operate license with respect to Pharmasset's HCV products. Furthermore, at a meeting in 2011 in which Merck informed Pharmasset that the '499 patent "could give Pharmasset trouble in the future," Mr. Price told a Merck attorney that he "hoped [the Merck attorney] found it easier to find the courthouse." See *supra*, ¶189. Such conduct would not create a reasonable belief that Merck had relinquished its rights to enforce the asserted claims. Gilead's attempt to characterize these negotiations as fundamentally inconsistent with an intent to enforce patent rights glosses over several facets of the negotiations. For example, Gilead claims in 2010 that Merck never told Pharmasset that Pharmasset should offer it different terms because Merck had patents that covered PSI-7977. However, in 2010, Merck responded to Pharmasset's proposals with counter-offers that did not provide a license for Pharmasset's HCV products. This is not the conduct of a party (Merck) that had waived its right to enforce its patents or of a party

(Pharmasset) that has a "reasonable belief" that Merck had waived its patent rights.

Finally, it does not appear that Merck had an actionable claim of infringement until Gilead's product was launched on the market in December 2013. Gilead's development activities prior to the launch is protected from infringement liability under 35 U.S.C. §271(e)(1). See generally *Merck KGaA* v. *Integra Lifesciences I, Ltd.*, 545 U.S. 193, 202 (2005) (explaining the §271(e)(1) safe harbor). Since Merck could not enforce its patents until Gilead's product launched, Merck had no affirmative duty to take any action and its failure to take any action cannot be interpreted as implied waiver. See, *e.g.*, *Bio-Tech. Gen. Corp.* v. *Genentech, Inc.*, 80 F.3d 1553, 1564 (Fed. Cir. 1996) (holding in the context of laches that "[w]ith no legal right to enforce, it cannot be said that Genentech unreasonably delayed during that time period [before FDA approval and launch].").

The Court concludes that Gilead has not proven its waiver defense and that Merck is not prohibited from asserting its patents on this basis.

V. CONCLUSIONS OF LAW—UNCLEAN HANDS

A. Background on Unclean Hands

The equitable doctrine of unclean hands has long existed as a principal of patent law. It arises from the maxim, "[h]e who comes into equity must come with clean hands." *Keystone Driller Co.* v. *Gen. Excavator Co.*, 290 U.S. 240, 241 (1933). The party asserting the defense of unclean hands must prove it by clear and convincing evidence. *In re Omeprazole Patent Litig.*, 483 F.3d 1364, 1374 (Fed. Cir. 2007); *Aptix Corp.* v. *Quickturn Design Sys., Inc.*, 269 F.3d 1369, 1374 (Fed. Cir. 2001). In a trio of cases in the 1930s and 1940s, the Supreme Court ap-

plied the doctrine of unclean hands to dismiss patent cases involving egregious misconduct.

First, in *Keystone*, which involved the manufacture and suppression of evidence, the plaintiff sued for patent infringement. 290 U.S. at 242. In an earlier infringement action against a different defendant, Keystone had prevailed and its three patents were declared valid. *Id.* Armed with this verdict, Keystone brought suit against the General Excavator Company and another company for infringing the same three patents and moved for a preliminary injunction. *Id.* The injunction was denied, and Keystone amended its complaint to allege infringement of two more patents. *Id.* The case then proceeded to trial. *Id.* at 242-43.

During the trial, it was discovered that after learning about a possible invalidating prior use, the patent applicant, who was Keystone's general manager and secretary, for one of the patents-in-suit paid the potential prior user to sign a false affidavit stating the prior use was an abandoned experiment, to assign any rights to the applicant, and to suppress any evidence of the prior use. *Id.* at 243. The Supreme Court framed this issue on appeal as follows:

> Plaintiff contends that the [unclean hands] maxim does not apply unless the wrongful conduct is directly connected with and material to the matter in litigation, and that, where more than one cause is joined in a bill and plaintiff is shown to have come with unclean hands in respect of only one of them, the others will not be dismissed.

Id. at 244. The Supreme Court described the general doctrine of unclean hands:

> [Plaintiff] must come into court with clean hands. He must be frank and fair with the court, nothing about the case under consideration should be guarded, but everything that tends to a full and fair determination of the matters in controversy should be placed before the court . . . It is a principle in chancery, that he who asks relief must have acted in good faith. The equitable powers of this court can never be exerted in behalf of [one] who has acted fraudulently, or who by deceit or any unfair means has gained an advantage. To aid a party in such a case would make this court the abetter of iniquity.

Id. at 244-45 (internal quotations and citations omitted). With that in mind, the Supreme Court explained that unclean hands applies only where the "unconscionable act of one coming for relief has immediate and necessary relation to the equity that he seeks in respect of the matter in litigation." *Id.* at 245. The misconduct must "affect the equitable relations between the parties in respect of something brought before the court for adjudication." *Id.* In *Keystone*, the Supreme Court stated that "it [] clearly appear[ed] that [Keystone] made the [first] case a part of his preparation in the [subsequent suits]." Therefore, Keystone's conduct with respect to one patent was sufficient to infect causes of action based on related patents and to prevent recovery on any of the asserted patents. *Id.* at 247.

Second, in *Hazel-Atlas Glass Co.* v. *Hartford-Empire Co.*, 322 U.S. 238 (1944), overruled on other grounds by *Standard Oil Co.* v. *United States*, 429 U.S. 17 (1976), also involving the manufacture and suppression of evidence, Hartford alleged Hazel-Atlas infringed its patent. The District Court, finding that infringement had not been proven, dismissed the case. *Id.* at 241. On appeal,

the Circuit Court, quoting extensively from an article written by William Clarke, an expert and former President of the Glass Workers' Union, found the patent valid and infringed. *Id.* at 241-42. The Circuit Court's decision caused both Hazel-Atlas and Hartford to contact Mr. Clarke, who eventually signed an affidavit that he wrote the article. *Id.* at 242-43. Hazel-Atlas then settled the patent lawsuit with Hartford. *Id.* at 243. In a separate anti-trust action by the United States against Hartford, seven years after the patent dispute, evidence disclosed that the patentee's attorney wrote the article to overcome issues at the Patent Office and had Mr. Clarke sign it as his own and publish it. *Id.* at 243-44.

The Supreme Court explained that the doctrine of unclean hands "has always been characterized by flexibility which enables it to meet new situations which demand equitable intervention, and to accord all the relief necessary to correct the particular injustices involved in these situations." *Id.* at 248. In *Hazel-Atlas*, the Court found the fraud was so egregious that it found the patent unenforceable against Hazel-Atlas and denied any recovery. *Id.* at 249-251.

Third, in *Precision Instrument Manufacturing Co.* v. *Automotive Maintenance Machinery Co.*, 324 U.S. 806 (1945), involving perjury and suppression of evidence, Automotive sued Precision for breach of contract and patent infringement. The parties had been adversaries in a prior interference proceeding, with competing patent applications covering torque wrenches. *Id.* at 809-12. During the interference proceeding, Automotive learned that Precision filed a fraudulent affidavit. *Id.* Instead of reporting this fraud to the Patent Office, Automotive settled the interference case with Precision and Precision assigned its rights in the application to Automotive. *Id.*

When Precision recommenced selling the allegedly infringing torque wrenches, Automotive brought suit against Precision. *Id.* at 814.

The Supreme Court reiterated general principals of the doctrine of unclean hands, including the broad discretion an equity court has in refusing to be an accomplice to the unclean litigant. *Id.* at 815. Commenting that "the maxim is far more than a banality," the Court explained:

> [The maxim of unclean hands] gives wide range to the equity court's use of discretion in refusing to aid the unclean litigant. It is "not bound by formula or restrained by any limitation that tends to trammel the free and just exercise of discretion." Accordingly one's misconduct need not necessarily have been of such a nature as to be punishable as a crime or as to justify legal proceedings of any character. Any willful act concerning the cause of action which rightfully can be said to transgress equitable standards of conduct is sufficient cause for the invocation of the maxim by the chancellor. Moreover, where a suit in equity concerns the public interest as well as the private interests of the litigants this doctrine assumes even wider and more significant proportions. The possession and assertion of patent rights are "issues of great moment to the public."

Id. at 815 (internal citations omitted).

The Supreme Court found that the history of the patents-in-suit was steeped in perjury and undisclosed knowledge of perjury. *Id.* at 816. The Court neither found nor required a finding that any of the patents-in-suit would not have issued if Automotive had disclosed to the examiner the information provided by its former employee. *Id.* at 815-19. Moreover, that information plainly had no bearing whatever on the patents that issued from

Automotive's own applications. *Id.* Yet the Court ruled that Automotive's unclean hands prevented enforcement of all of the patents-in-suit. *Id.* at 819.

Notably, in *Hazel-Atlas* and *Precision*, the Supreme Court reversed lower courts that had been unwilling to bar suit for the described misconduct. In *Keystone*, the circuit court reversed the district court's finding denying the unclean hands defense which was affirmed by the Supreme Court.

Almost 70 years after *Precision*, the Federal Circuit issued its *en banc* decision in *Therasense, Inc.* v. *Becton, Dickson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011). *Therasense* addressed the separate defense of inequitable conduct—a defense that Gilead does not assert in this case—but the Federal Circuit's discussion of the differences between inequitable conduct and unclean hands confirmed that unclean hands remains a viable defense to patent infringement. *Id.* at 1285-89. As the Federal Circuit explained, the doctrine of inequitable conduct grew from the older doctrine of unclean hands. *Id.* at 1287. Whereas unclean hands can involve improper conduct before either the Patent Office or the courts, inequitable conduct relates solely to conduct before the Patent Office. *Id.* Additionally, where unclean hands affects the enforceability of a patent in a particular lawsuit, inequitable conduct carries far more severe consequences for the patent holder—"unenforceability of the entire patent rather than mere dismissal of the instant suit." *Id.* For this reason, inequitable conduct requires a "finding of both intent to deceive and materiality." *Id.* The Federal Circuit made clear, however, that unclean hands remains a viable defense, and does not require a finding of materiality:

> This court recognizes that the early unclean hands cases do not present any standard for materiality. Needless to say, this court's development of a materiality requirement for inequitable conduct does not (and cannot) supplant Supreme Court precedent. Though inequitable conduct developed from these cases, the unclean hands doctrine remains available to supply a remedy for egregious misconduct like that in the Supreme Court cases.

Id. Thus, the Federal Circuit's *Therasense* decision confirmed the continuing viability of the unclean hands doctrine.

B. Other Cases Involving Unclean Hands

Against this standard from the Supreme Court and Federal Circuit, other courts have applied the doctrine of unclean hands to situations involving lying under oath, unethical business conduct, or litigation misconduct.

In *Aris-Isotoner Gloves, Inc.* v. *Berkshire Fashions, Inc.*, 792 F. Supp. 969, 970 (S.D.N.Y. 1992), aff'd, 983 F.2d 1048 (2d Cir. 1992), the Court found egregious misconduct where the Defendant's president lied under oath in a prior proceeding. In an attempt to prove detrimental reliance on Plaintiff's conduct, Berkshire President Issac Dweck testified at a contempt hearing that his company initially sold very small quantities of an infringing glove and after nothing happened—it was not sued for infringement—the company increased the amounts sold in the following years. *Id.* In a remand hearing, after being confronted with contrary evidence in interrogatory responses, Mr. Dweck testified that Berkshire sold over 50,000 dozen gloves and sales decreased, not increased, the following year. *Id.* He also admitted that his prior testimony had been incorrect even though the relevant

figures had been available to him at the prior hearing. *Id.*

The court found that Mr. Dweck had fabricated his testimony in light of "the inadequately explained and obvious contradictions as to testimony of direct relevance." *Id.* The court also rejected Berkshire's explanation that Mr. Dweck had confused sales of the infringing glove with another glove as "wholly inconsistent" with Mr. Dweck's "original, confident story." *Id.* at n.2. The court also rejected Berkshire's contention that Mr. Dweck's inconsistent testimony was immaterial because regardless of which version was believed, it did not affect the outcome. *Id.* at 971. However, the court found that once Berkshire engaged in the egregious misconduct, the doctrine of unclean hands prevented Berkshire from obtaining relief. *Id.* Other courts have also found unclean hands in the presence of false testimony. See *Mas* v. *Coca-Cola Co.*, 163 F.2d 505, 511 (4th Cir. 1947) (finding the plaintiff had unclean hands and upholding dismissal of plaintiff's suit where plaintiff submitted false testimony and forged documents to the Patent Office); *C.C.S. Commc'n Control, Inc.* v. *Sklar*, Case No. 86-cv-7191-WCC, 1987 WL 12085, at *2-3 (S.D.N.Y. 1987) (denying request for equitable remedy because plaintiff committed perjury).

Improper business conduct can also invoke unclean hands. In *Clements Indus., Inc.* v. *A. Meyers & Sons Corp.*, 712 F. Supp. 317, 318 (S.D.N.Y. 1989), plaintiff attempted to extract confidential information from the defendant, not for legitimate commercial reasons, but rather to obtain the defendant's confidential trade secrets. The court found that "[t]his deceptive dealing fully supports [defendant's] contention that [plaintiff] has 'unclean hands'" and dismissed plaintiff's claims. *Id.* at 328.

Courts have found improper business dealings can invoke unclean hands in several other situations. See *Worthington* v. *Anderson*, 386 F.3d 1314, 1321-22 (10th Cir. 2004) (affirming dismissal of plaintiff's trademark claims against former business partner for unclean hands where plaintiff "threw economic obstacles in the way of" defendant's ability to comply with terms of arbitration agreement); *Saudi Basic Indus. Corp.* v. *ExxonMobil Corp.*, 401 F. Supp. 2d 383, 395 (D.N.J. 2005) ("There is also caselaw to support application of the unclean hands doctrine when a business partner engages in acts of self-dealing."); *FLIR Sys., Inc.* v. *Sierra Media, Inc.*, 965 F. Supp. 2d 1184, 1197 (D. Or. 2013) ("FLIR's false advertising claim . . . is barred, in light of FLIR's false advertising on the same subject matter, by the doctrine of unclean hands."); *Unilogic, Inc.* v. *Burroughs Corp.*, 10 Cal. App. 4th 612, 617-621 (1992) (affirming, *inter alia*, that plaintiff's failure to return defendant's software and continued use of software after development agreement terminated was unclean hands barring plaintiff's legal claim for conversion); *Fed. Folding Wall Corp.* v. *Nat'l Folding Wall Corp.*, 340 F. Supp. 141, 146 (S.D.N.Y. 1971) (plaintiff breaching employment contract with defendant and inducing trademark owner to cancel license to defendant was unclean hands warranting dismissal of case); *Metro Publishing, Ltd.* v. *San Jose Mercury News, Inc.*, 861 F. Supp. 870, 880 (N.D. Cal. 1994) (finding plaintiff's deliberate attempt to create trademark confusion constituted unclean hands and granting summary judgment against trademark holder "on this basis alone").

Courts have also found unclean hands applicable where a party has engaged in litigation misconduct. In *U.S. Ethernet Innovations, LLC* v. *Texas Instruments Inc.*, Case No. 6:11-cv-491-MHS, 2014 WL 4683252, at *6

(E.D. Tex. 2014), defendant's unprofessional conduct, including attempting to interfere with plaintiff's expert, constituted unclean hands

C. Application of Unclean Hands to Findings of Fact

Against this backdrop, the Court must review the facts to determine whether Merck's misconduct rises to the level of egregious misconduct sufficient to bar Merck from maintaining this suit against Gilead. All of the Court's findings are made under the standard of clear and convincing evidence.

In this case, numerous unconscionable acts lead the Court to conclude that the doctrine of unclean hands bars Merck's recovery against Gilead for infringement of the '499 and '712 Patents. Merck's misconduct includes lying to Pharmasset, misusing Pharmasset's confidential information, breaching confidentiality and firewall agreements, and lying under oath at deposition and trial. Any one of these acts—lying, unethical business conduct, or litigation misconduct—would be sufficient to invoke the doctrine of unclean hands; but together, these acts unmistakably constitute egregious misconduct that equals or exceeds the misconduct previously found by other courts to constitute unclean hands. Merck's acts are even more egregious because the main perpetuator of its misconduct was its attorney.

1. Pharmasset and Merck Interactions

The first set of unconscionable acts barring Merck's recovery from Gilead for infringement concerns the actions of Merck and its patent prosecutor, Dr. Durette, in learning the confidential structure of Pharmasset compound PSI-6130 and pursuing patent claims to cover that compound in violation of the Merck-Pharmasset firewall and Merck's own policies.

Interactions between Merck and Pharmasset began in 2001 when the companies discussed potential collaboration opportunities. FOF ¶37. As part of these discussions, the companies signed a NDA. *Id.* In 2003, pursuant to the NDA, Pharmasset gave Merck an overview of its HCV program, including an overview of its lead compound, PSI-6130. FOF ¶¶42-44. Shortly after, the companies signed a Material Transfer Agreement (MTA), which permitted Merck to test and evaluate PSI-6130. FOF ¶46. After the testing revealed encouraging results, Merck requested additional information about the structure of PSI-6130. FOF ¶50. Merck assured Pharmasset that structural information about PSI-6130 would be firewalled and on this basis, the parties set up a phone call for March 17, 2004. FOF ¶¶53-59.

It was not as though Merck and Dr. Durette stumbled into that call unaware of the subject matter, or the impropriety of Dr. Durette's participation. All of this information was contained in emails and a term sheet distributed to Merck, and Dr. Durette in particular, in advance of the meeting. In these e-mails, Merck's employees were fully advised in advance that Pharmasset would disclose its closely guarded PSI-6130 compound to Merck employees bound by an NDA and firewall. Merck further knew that Pharmasset's compound was an NS5B polymerase inhibitor just like its own compounds from the Merck-Isis collaboration that formed the bases of the '499 and '712 patent applications. Dr. Durette's legal and scientific sophistication preclude the possibility that he was unaware or misunderstood the relationship of the anticipated disclosure to his own HCV work for Merck.

Compounding the problem, Merck's representatives, Dr. Durette and Dr. Pon, committed further unconscionable acts during the call. Based on the contemporaneous

notes prepared by Pharmasset's Alan Roemer, after learning key structural features of PSI-6130, Dr. Durette voiced concern that he might have a problem, stating "seems quite related to things I'm involved with," EX-2098, but he never revealed that he was prosecuting Merck's own HCV patent applications. This was information unavailable to Pharmasset. Moreover, Dr. Durette's involvement with Merck's HCV patents violated the understanding the parties had about their firewall obligations, which excluded anyone involved with Merck's internal HCV program. EX-2302. This most certainly would include the Merck-Isis collaboration that Dr. Durette was involved with. After suggesting there might be a problem, both Dr. Durette and Dr. Pon assured Pharmasset that they were within the firewall and continued the conversation.

On that call, Dr. Durette obtained the full structure of PSI-6130 and he subsequently continued to prosecute Merck's HCV patent portfolio. Although he claims to have recused himself from the Pharmasset-Merck due diligence, that is not where the harm lay. It was, in fact, wrong for Merck to allow Dr. Durette to continue to prosecute the '499 and '712 Patent applications. Ironically, in the course of what the Court deems a complete fabrication of testimony at his deposition, Dr. Durette himself explained why this conduct was so egregious. As he said, having learned the structure of PSI-6130, his judgment was tainted. And, indeed it was. His February 2005 claim amendments to the '499 patent were made possible by the information he unfairly obtained in March 2004. Proper recusal would have mandated that Dr. Durette cease work on Merck's HCV patents as well. Such conduct was required by Merck's own internal policies

and would have been consistent with a common understanding of recusal.

Based on the foregoing, there can be no doubt that Merck used this highly confidential information to benefit its own prosecution of its stalled '499 Patent application. Dr. Pon and Dr. Durette's deception about Dr. Durette being firewalled, and Merck's subsequent decision to allow Dr. Durette to continue to prosecute the '499 and '712 with full knowledge of the structure of Pharmasset's PSI-6130 constitute unacceptable business conduct. It is clear to this Court that Dr. Durette improperly used this information to inform his conduct in amending the '499 Patent claims a mere 18 days after the Clark application published. Those amendments related to compounds Merck never tested during its collaboration with Isis, and the amendments were not prompted by requests from the inventors or prodding by the patent examiner to narrow the claim scope. Thinking that he was now free from what he knew were his obligations under the NDA, Dr. Durette pounced on the opportunity to capitalize on what he improperly had learned a year earlier.

The Court concludes that each of the foregoing unconscionable acts has an "immediate and necessary relation to . . . the matter in litigation" because the patents that resulted from this series of unconscionable acts are now asserted against Gilead, Pharmasset's successor-in-interest. See *Keystone*, 290 U.S. at 245. The Court finds the facts in *Clements* analogous to Merck's misconduct. In *Clements*, the court found plaintiff's deceptive dealing in learning defendant's confidential trade secrets warranted a finding of unclean hands. In a similar situation, Merck sent Dr. Durette to "view the structure during a patent due diligence meeting" under deceptive circumstances. EX-0153.0001. As detailed *supra* FOF ¶¶54-92,

the evidence shows Dr. Durette lied to Pharmasset about being within the firewall, then Merck allowed Dr. Durette, with his tainted judgment, to continue prosecuting the related Merck-Isis patents-in-suit and to draft claims to target Pharmasset's inventions. The Court finds Merck's deceptive dealing warrants a finding of unclean hands. See *Clements*, 712 F. Supp. at 328.

2. Litigation Misconduct

The Court concludes that the doctrine of unclean hands also bars Merck's recovery against Gilead for infringement of the '499 and '712 Patents based on additional reprehensible acts by Merck and Dr. Durette amounting to litigation misconduct, including his false testimony in this case. Based on the Court's findings *supra* FOF ¶¶107-170, the record shows that Dr. Durette presented inconsistent, contradictory, and untruthful testimony, and that testimony was sponsored by Merck.

Throughout the prosecution of this case, Dr. Durette continued to deceive Gilead and this Court. His trial testimony was inconsistent with his deposition testimony in numerous material and critical respects. He recanted a major portion of his prior testimony without any warning to Gilead until revealed in Merck's opening statement.[3] He gave inconsistent stories about his participation on the March 2004 due diligence call and the circumstances that led to his amendments to the '499 claims. His trial testimony was not credible on significant matters related to this case.

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[3] Also troubling is Merck's counsel's failure to disclose to Gilead or this Court that Dr. Durette would recant his prior testimony as soon as Merck learned that Dr. Durette's prior testimony was unsustainable—wholly inconsistent with the record evidence. Opening statement was not the preferred time for such a disclosure. See ABA Model Rules Prof. Conduct, Rule 3.3(a).

Remarkably, when he faced the Court and jury at trial, Dr. Durette recanted his testimony that he had not been on the Pharmasset-Merck due diligence call. At trial, he testified that he just did not remember what had taken place 11 years ago. Trial Tr. 347:9-22 (Durette). His trial testimony is completely inconsistent with his deposition testimony. Dr. Durette had previously testified at his deposition that he was certain he had not participated in the call and not learned the structure of Pharmasset's compound:

> Q: How can you be so sure 11 years later that you were never told what the structure was for the 6130 compound?
>
> A: The structure was not revealed to me by individuals at Merck or otherwise. I'm positive of that. I never saw a structure of the Pharmasset compounds until it was published later on in time."

Durette Dep. Tr. (EX-2388) at 31:4-10.

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> Q: How do you know you weren't told it?
>
> A: Because I remember that.
>
> Q: You remember what?
>
> A: That the structure was not disclosed to me.
>
> Q: How do you remember that?
>
> A: Because I do.

Durette Dep. Tr. at 169:10-18, ECF 410-3.

Further, as rationale for his memory of the events, Dr. Durette embellished his "clear" recollection during his deposition by stating confidently—even sanctimoniously:

> Q: How can you be so sure of that memory?

> A: Because I was not part of the patent due diligence for the structure, so I would not have been privy to any revelation of the structure to me as a patent attorney working on a related docket. So this was assigned to another person. I would not have participated in a phone call wherein it was a potential for the revelation of the structure to Merck counsel.
>
> Q: Why would that have been inappropriate for you to have been told the structure of 6130?
>
> A: Because I was prosecuting a docket which had potential a conflict with Pharmasset's IP positions on the subject matter.

Durette Dep. Tr. (EX-2388) at 38:1-13.

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> Q: Again, why would it have been inappropriate or wrong for you to have been told the 6130 structure?
>
> A: It would have tainted my judgment as to what claims to pursue in the Merck/Isis collaboration.
>
> Q: How would it have tainted your judgment?
>
> A: Having structural information is very important as to what the competition is doing in its research efforts. We had a policy in Merck on a particular docket area if there were potential licensing opportunities in a related area, that due diligence would be assigned to a non—an attorney that was not prosecuting a particular docket in a related area.

Durette Dep. Tr. (EX-2388) at 38:21-39:7.

Dr. Durette's trial testimony about failed memory rings hollow. By the time he appeared at trial, Dr. Durette was aware that Pharmasset's Alan Roemer had contemporaneous notes that indisputably placed him at

the meeting and would expose his false testimony. But that was not the end of Merck's problems. As he tried to put a new gloss on his conduct, Dr. Durette placed blame on his colleague Pamela Demain, stating that she had instructed him to attend the due diligence call and that his supervisor approved it. However, Ms. Demain testified credibly that she did not.

He further testified untruthfully that before the meeting he had "no knowledge of what the structure was going to be revealed to me." Trial Tr. 351:3-4 (Durette). He stated that he and his supervisor concluded that there was little chance of overlap with Dr. Durette's HCV docket since the field of nucleosides was so broad. However, this testimony simply does not hold up against the information about Pharmasset's compound disclosed on the term sheet that Merck and Dr. Durette reviewed before the meeting. As Ms. Demain credibly testified, Merck knew going into the meeting that Pharmasset's compound was an NS5B polymerase inhibitor just like Merck's compounds. Moreover, it is not credible to the Court that Dr. Durette had such a clear memory about a meeting with his supervisor prior to the due diligence call when he also testified that he lacked any memory of the events 11 years prior.

Further at trial, Dr. Durette spun a new tale about the genesis of the February 1, 2005, amendments to the claims in the '499 patent application. At his deposition, Dr. Durette could not recall when he had first seen the Clark patent application containing PSI-6130 that was published on January 13, 2004. He averred that he might not have seen it until after he filed his amended claims. Durette Dep. Tr. 51:2-15, ECF 410-3. He further testified that he did not associate the Clark patent application with PSI-6130; he explained:

> Q: How is it that you would know that you would not in January 2005 have realized that Paragraph 0168, that chemical structure there, was 6130?
>
> A: Because this was one compound out of a plethora of compounds in the publication.

Durette Dep. Tr. at 52:19-25, 53:1-6, ECF 419-1.

Although Dr. Durette professed not to recall seeing the Clark publication before his amended claims were filed, he did have a clear recollection of other publications that "pointed towards fluoro as being an important invention for HCV nucleosides. . . ." Durette Dep. Tr. at 65:18-25, ECF 410-3. When asked at his deposition why he had amended the claims on February 1, 2005, he testified "We wanted to expedite prosecution of the application." Durette Dep. Tr. at 62:5-9, ECF 419-1. He also testified that competitors were disclosing fluoro compounds that Merck had support for in its patent applications. Durette Dep. Tr. at 63:18-64:7, ECF 419-1. However, he avoided associating his amendment with the Clark publication.

At trial, Dr. Durette offered different reasons for the amendments. He testified that in addition to wanting to expedite the examination, Merck wanted to capture the subject matter that was most important to the Merck-Isis collaboration. Trial Tr. 404:14-19 (Durette). This testimony was in stark contrast to the testimony of other witnesses that Merck had never tested any of those compounds during the Merck-Isis collaboration and none of the inventors had discussed the amendments with him before the amendment. Dr. Durette's testimony is not credible on this issue.

Additionally, at trial, Dr. Durette now recalled clearly that he did see the Clark publication before he filed the

amendments. When asked when he recalled seeing the Clark publication, Dr. Durette testified:

> A: I don't have a specific recollection of the timing, but I know it was before the filing of my second amendment because of two reasons: A, I was monitoring the competition in the area, and B, there must have been a triggering event that led me to reexamine my docket and take a look at my '499 application which had been pending for about a year and a half. So I was convinced—or I became convinced that it was the publication of the application that led me to reexamine and then file the secondary amendment, or secondary amendment 18 days later.

Trial Tr. at 390:25-391:9 (Durette).

Although Merck would ask this Court to accept the simple explanation that Dr. Durette's memory failed him and that the inconsistencies are harmless, in light of Dr. Durette's persistent pattern of falsifications, the Court cannot interpret his testimony in this manner. It is overwhelmingly clear to the Court that Dr. Durette sought at every turn to create the false impression that Merck's conduct was above board.

Knowing that he should not have been on the Pharmasset call and that upon learning the structure of PSI-6130, Dr. Durette should have recused himself from the Merck HCV docket. Instead, he first tried to deny knowledge of his role in the Pharmasset due diligence. When that did not work, he recanted his sworn testimony at trial and tried to blame others at Merck for compelling him to participate in the call. In order to first justify the propriety of the claim amendments made on the heels of the Clark publication, first he claimed not to have seen the Clark publication before he filed his amendments and

when that story did not pan out he testified at trial that the Clark publication was actually the trigger that caused him to reexamine his stale '499 claims.

In sum, several important facts are clear. First, Dr. Durette provided false testimony to this Court on important issues regarding Merck's validity claims. Second, Merck sponsored and encouraged Dr. Durette's conduct in the prosecution of the '499 Patent, including Dr. Durette's improper participation on the Pharmasset call and his continued prosecution of Merck's HCV docket. Third, Merck fully aligned itself with Dr. Durette, as evidenced by its provision of legal counsel to Dr. Durette at his deposition and trial and designation of him as a Rule 30(b)(6) witness on selected issues. Merck's counsel spent two days preparing him for his deposition and for trial. Fourth, the untruthful testimony offered by Dr. Durette in his deposition and at trial was not incidental, but rather was directed at and supported Merck's validity arguments, and went to the heart of significant issues in this case. Fifth, by making Dr. Durette a centerpiece of its case, from the opening statement to the closing argument, Merck's litigation misconduct infects the entire lawsuit, including the enforceability of the '712 Patent.

The Court concludes that Dr. Durette's testimony has an "immediate and necessary relation to . . . the matter in litigation" because Dr. Durette testified regarding the key invalidity defenses presented to the jury, and regarding how Merck obtained the patents that are now asserted against Gilead, Pharmasset's successor-in-interest. *Keystone*, 290 U.S. at 245. Dr. Durette's testimony played an influential role at trial on the critical issue of the relationship between the amended '499 claims drafted solely by Dr. Durette and the content of the earlier specification. In response to questions by Merck, he testified

that the claims were fully described in the application he filed in 2002. See *supra*, FOF ¶135. Although other witnesses presented testimony regarding written description and enablement, Dr. Durette was a key witness on this issue and thus, such additional evidence does not absolve Merck of its unclean hands with respect to Dr. Durette's fabrications.

The Court finds the *Aris-Isotoner* case particularly persuasive as it relates to Merck's misconduct at Dr. Durette's deposition and at trial. In *Aris-Isotoner*, the defendant's president gave testimony in one proceeding that directly contradicted his testimony in a prior proceeding. 792 F. Supp. at 970. That court found "no other conclusion can exist but that [defendant's president] fabricated his testimony in either the instant proceedings or in the original contempt proceedings." *Id.* That court found the witness's "half-hearted" claim that he was "confused" in the initial proceeding was "wholly inconsistent with [his] original, confident story." *Id.* at 970 n.2. On the basis of the fabricated testimony, the court dismissed defendant's laches defense. *Id.* at 972. This Court finds these facts akin to Dr. Durette's confident explanation at his deposition, recanted at trial, about why he never learned the structure of PSI-6130 from Pharmasset and his wholly inconsistent testimony regarding the genesis of the February 1, 2005, claims amendments.

As in *Aris-Isotoner*, Dr. Durette's deposition testimony and trial testimony in this case are irreconcilable. The Court concludes that Dr. Durette lied in both proceedings. Further borrowing from *Aris-Isotoner*, this Court "lack[s] complete confidence as to which—if either—of the two testimonies is correct." *Aris-Isotoner*, 792 F. Supp. at 971. The Court concludes that Dr. Durette's fabricated deposition testimony and his false trial testi-

mony, both of which Merck sponsored, are unconscionable acts that warrant a finding of unclean hands.

The Court also takes into account the fact that Dr. Durette was Merck's attorney. Among many important duties, attorneys have a duty of candor.[4] The legal system requires witnesses to supply complete and truthful testimony. If a witness fabricates testimony, justice is not served and when an attorney lies under oath, the Court cannot sanction such conduct. Dr. Durette, as Merck's former employee and 30(b)(6) witness, lied repeatedly at his deposition and at trial. The Court cannot condone such conduct from any witness, let alone an attorney.

3. Merck's Arguments Against Unclean Hands

Merck argues that Gilead's theory of unclean hands is precluded by the jury's verdict. If it is not, Merck denies all misconduct and seeks to diminish Dr. Durette's testimony to the failed memory of a retired employee. Alternatively, Merck argues that even if the Court finds fabricated testimony, unethical business practices, and litigation misconduct, none of that conduct amounts to unclean

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[4] The New Jersey Disciplinary Rules of Professional Conduct, Rule 3.3 which governs candor toward the tribunal, provides: "A lawyer shall not knowingly: (1) make a false statement of material fact or law to a tribunal." N.J. R.P.C. § 3.3(a)(1). Rule 4.1 governs truthfulness in statements to others, and provides: "In the course of representing a client a lawyer shall not knowingly: (1) make a false statement of material fact or law to a third person." N.J. R.P.C. § 4.1(a)(1). The Court also notes the Patent Office has promulgated the "USPTO Rules of Professional Conduct," which conforms to the Model Rules of Professional Conduct of the American Bar Association. See 37 C.F.R. § 11.100 *et seq.* The Patent Office's rules are virtually identical to the New Jersey Rules of Professional Conduct with respect to candor towards the tribunal and truthfulness in statements to others.

hands for several reasons: (1) its misconduct is not egregious; (2) amending claims to cover a competitor's product is expressly allowed; (3) Merck and Dr. Durette did not have an intent to deceive; (4) Dr. Durette's conduct cannot be imputed to Merck; (5) there is no immediate and necessary relation between the alleged misconduct and the litigation; and (7) any misconduct did not involve the '712 Patent. The Court addresses each in turn.

As a threshold argument, Merck argues that the jury's verdict prevents a finding of unclean hands. Merck Proposed Conclusions of Law ("COL") 46-54, ECF 407. According to Merck, the only unclean hands theory set forth in Gilead's interrogatory responses is predicated on Merck's derivation of the inventions claimed in the '499 and '712 Patents from Pharmasset's confidential disclosures. Since the jury found the claims of the '499 and '712 Patent were not invalid for lack of written description or lack of enablement, the priority date of the asserted claims is January 18, 2002. As a result, Merck argues that it could not have derived the invention from Pharmasset in 2004 because its invention was completely conceived by January 18, 2002.

The Court disagrees with Merck's view of Gilead's interrogatory responses and the jury's verdict. Gilead's interrogatory responses made clear that its unclean hands defense is based on the belief that Merck improperly derived information about Pharmasset's invention from Pharmasset's confidential disclosures. Gilead's Supp. Response to Interrogatories 9-10, ECF 218-2. These responses did not, as Merck argues, limit Gilead to a theory of unclean hands based on 35 U.S.C. § 102(f), also known "derivation," which states a person shall be entitled to a patent unless "he did not himself invent the subject matter." If Gilead's unclean hands disclosure was interpret-

ed as only disclosing a theory of unclean hands based strictly on §102(f), it would be entirely redundant of Gilead's §102(f) invalidity defense. It would also allow Merck's misconduct in obtaining Pharmasset's confidential information during the 2004 phone call and subsequent litigation misconduct to go unchecked. Gilead's responses, instead, provide Gilead the ability to pursue an unclean hands defense covering circumstances where Merck improperly received information from Pharmasset. Thus, the jury's verdict, which did foreclose a §102(f) invalidity defense, does not prevent Gilead from pursuing a defense of unclean hands.

Moving to Merck's alternative arguments, first, Merck argues that cases finding unclean hands have involved repeated and egregious misconduct involving an elaborate scheme to defraud. According to Merck, isolated instances of misconduct or conduct that is susceptible to innocuous explanations do not rise to the level of egregious misconduct. However, Merck's argument glosses over the serious and outrageous conduct in this case in which Merck engaged in litigation misconduct by presenting fabricated testimony and engaging in improper business practices. The cases Merck cites in support of its argument do not contain findings of lying, unethical business practices, and litigation misconduct and instead turn on the fact the Court did not have sufficient evidence to determine whether lying occurred. See *Excelled Sheepskin & Leather Coat Corp.* v. *Oregon Brewing Co.*, 2014 WL 3874193, at *10 (S.D.N.Y. Aug. 5, 2014) (finding defendant failed to present clear and convincing evidence that plaintiff's representations were inaccurate); *Top Grade Construction* v. *Fluoresco Lighting-Sign Maintenance*, 2012 WL 1122599, at *10 (N.D. Cal. Apr. 3, 2012) (denying summary judgment that plaintiff had unclean

hands because defendant "presented no evidence to show that [p]laintiff intentionally misrepresented" information and there was a triable issue of fact as to whether plaintiff explanation for an inconsistent response is credible); *Lenz* v. *Universal Music Corp.*, 2010 U.S. Dist. LEXIS 16899, at *15-17 (N.D. Cal. Feb. 25, 2010) (no evidence any misstatements were made in bad faith); *Big Lots Stores, Inc.* v. *Jaredco, Inc.*, 182 F. Supp. 2d 644, 652 (S.D. Ohio 2002) (finding conduct was susceptible to more innocuous explanations because there was no evidence that a witness had lied or that counsel acted wrongfully and deceitfully); *In re Coordinated Pretrial Proceedings in Antibiotic Antitrust Actions* (*Pfizer, Inc.* v. *Int'l Rectifier Corp.*), 538 F.2d 180, 195-196 (8th Cir. 1976) (any misstatements were an oversight because "the facts so concealed were basically supportive of [the concealing party's] contentions"); *Helene Curtis Indus.* v. *Sales Affiliates*, 121 F. Supp. 490, 510, 512 (S.D.N.Y. 1954) (holding unclean hands was not applicable because there was no evidence that the patentee had deliberately misrepresented or omitted information).

Merck also attempts to downplay the seriousness of its misconduct by relying on post-*Therasense* cases that apply the egregious misconduct prong of inequitable conduct. Merck argues these cases find egregious misconduct in the presence of systematic and outrageous deception, or in other words, conduct that is more extreme than the conduct in this case. Merck Proposed COL ¶45, ECF 407 (citing *Apotex, Inc.* v. *UCB, Inc.*, 970 F. Supp. 2d 1297, 1328 (S.D. Fla. 2013) (inventor's "overall pattern of misconduct" included "purposefully mislead[ing]" the Patent Office by misrepresenting invalidating prior art, withholding references, concealing detrimental test results, fabricating results for tests that were not conduct-

ed, and facilitating the submission of a misleading expert report), aff'd on other grounds, 763 F.3d 1354 (Fed. Cir. 2014); *Intellect Wireless, Inc.* v. *HTC Corp.*, 732 F.3d 1339, 1342, 1343-44 (Fed. Cir. 2013) (inventor "filed multiple unmistakably false declarations during prosecution" to overcome prior art)). What Merck's argument fails to recognize is that the conduct in this case consists of systematic and outrageous deception in conjunction with unethical business practices and litigation misconduct. As discussed above, Merck violated its understanding with Pharmasset about who would receive structural information about PSI-6130. Compounding this problem, Merck attempted to minimize and conceal this behavior with Dr. Durette's fabricated testimony at his deposition and at trial. Even if the Court credits Merck's argument that it did not control the content of Dr. Durette's deposition testimony, the Court cannot ignore the fact that Merck never sought to correct the record until trial. And even then, Merck's witness continued to lie about what he knew and when he knew it.

Further relying on post-*Therasense* cases, Merck argues that misleading statements are not enough to rise to the level of egregious misconduct. Of course, the Court has found more than misleading statements. The Court has found that Merck engaged in improper business practices and litigation misconduct. That said, Merck's cases do not fully support its argument that misleading statements do not rise to the level of egregious misconduct; instead, those cases found that when it was ambiguous or not clear whether a statement was false, that uncertainty does not create egregious misconduct. See *Smith & Nephew, Inc.* v. *Interlace Med., Inc.*, 955 F. Supp. 2d 69 (D. Mass. 2013) (finding ambiguous misrepresentation was not egregious misconduct); *Network*

Signatures, Inc. v. *State Farm Mut. Auto. Ins. Co.*, 2012 WL 2357307, at *7 (C.D. Cal. June 13, 2012) (not clear whether statement that delay in paying patent maintenance fee was unintentional was made to deceive the Patent Office), rev'd on other grounds, 731 F.3d 1239 (Fed. Cir. 2013); *Ohio Willow Wood Co.* v. *Alps S., LLC*, 735 F.3d 1333, 1339 (Fed. Cir. 2013) (denying summary judgment))

Second, Merck argues that its conduct is not improper because the law expressly allows it to file claims that cover a competitor's product. See *Kingsdown Med. Consultants, Ltd.* v. *Hollister Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988). In *Kingsdown*, the Federal Circuit stated:

> [T]here is nothing improper, illegal or inequitable in filing a patent application for the purpose of obtaining a right to exclude a known competitor's product from the market; nor is it in any manner improper to amend or insert claims intended to cover a competitor's product the applicant's attorney has learned about during the prosecution of a patent application. Any such amendment or insertion must comply with all statutes and regulations, of course, but, if it does, its genesis in the marketplace is simply irrelevant and cannot of itself evidence deceitful intent.

Id. (citing *State Indus., Inc.* v. *A.O. Smith Corp.*, 751 F.2d 1226, 1235 (Fed. Cir. 1985)). There are multiple problems with Merck's argument. First, Merck's argument relies on the assumption that it amended the claims to cover a competitor's product. But Dr. Durette testified that he amended the claims to cover the most important compounds in the Merck-Isis collaboration and not to cover Pharmasset's product. When pressed at trial, Dr. Durette refused to cleanly admit that he amended

the claims to cover structures he saw in the Clark publication. Thus, Merck's argument fails to fit the evidence adduced during this case.

Even if that were not the case, the Court finds *Kingsdown*'s holding is premised entirely on the assumption that a patentee learns of a competitors' product through legal and ethical means. Here, Merck learned of PSI-6130, Pharmasset's crown jewel, during its due diligence of Pharmasset. This information was provided to Merck in a confidential setting to Merck employees who were purportedly firewalled from the prosecution of Merck's HCV patents. The Federal Circuit's holding in *Kingsdown* does not permit individuals to disregard firewalls and confidentiality agreements; holding otherwise, would bring the marketplace to a halt as companies would be weary to engage in due diligence lest a competitor uses that information to obtain patents.

Third, Merck claims Dr. Durette did not have an intent to deceive. Merck notes that "to meet the clear and convincing evidence standard, the specific intent to deceive must be the 'single most reasonable inference able to be drawn from the evidence." Merck Proposed COL ¶60, ECF 407 (quoting *Therasense*, 649 F.3d at 1290). According to Merck, Dr. Durette did not have an intent to deceive because he disclosed his conflict during the 2004 phone call and any further misstatements were simply the result of a lapse in memory. As support, Merck cites several cases where courts have refused to infer bad faith or intent to deceive from the fact of a misrepresentation, without more. Merck Proposed COL ¶¶64, 65, 66, 69, ECF 407 (citing *Outside the Box Innovations, LLC* v. *Travel Caddy, Inc.*, 695 F.3d 1285, 1294-95 (Fed. Cir. 2012); *Larson Mfg. Co. of S.D.* v. *Aluminart Prods. Ltd.*, 559 F.3d 1317, 1341 (Fed. Cir. 2009); *Ex-*

celled Sheepskin, 2014 WL 3874193, at *10 (S.D.N.Y. Aug. 5, 2014); *Abbott Labs.* v. *Sandoz, Inc.*, 544 F.3d 1341, 1354-57 (Fed. Cir. 2008); *Eastman Kodak Co.* v. *Agfa-Gevaert N.V.*, 560 F. Supp. 2d 227, 301 (W.D.N.Y. 2008), judgment entered, 2008 WL 5115252 (W.D.N.Y. Dec. 4, 2008)). Merck also cites cases where courts have refused to infer intent to deceive from errors that could be due to memory lapses. Merck Proposed COL ¶67, ECF 407 (citing *BASF Corp.* v. *Aristo, Inc.*, 872 F. Supp. 2d 758, 779 (N.D. Ind. 2012); *United States* v. *Bailey*, 123 F.3d 1381, 1395 (11th Cir. 1997)). While Merck accurately conveys the holdings of the cases it cites, these cases are inapposite to the present facts, which involve substantially more than a "misrepresentation, without more" or "errors that *could* be due to memory lapses." As explained throughout this order, Merck's fabricated testimony was more than just an isolated incident, but happened repeatedly during Dr. Durette's deposition. At trial, Dr. Durette continued to be evasive and told a story that was not credible. Moreover, while perhaps a common and convenient post-fabrication excuse, a memory lapse does not explain Dr. Durette's confident and sanctimonious deposition testimony, nor does it explain Dr. Durette's sudden moments of purported clarity at trial, when for example, he magically recalled meeting with a supervisor prior to attending the 2004 phone call with Pharmasset. As such, the present facts are significantly more disturbing than those in any of the cases cited by Merck. The evidence in this case fully supports a finding of intent to deceive.

Fourth, Merck argues that Dr. Durette's conduct cannot be imputed to Merck. It argues that a non-litigant's misconduct cannot support unclean hands unless it is attributable to the litigant. Since Dr. Durette was no long-

er a Merck employee at the time of his deposition, was not under Merck's control, and was not a 30(b)(6) witness as to the subject of the 2004 call, Merck argues there is no basis to impute Dr. Durette's intent and conduct. Merck also argues it did not try to hide Dr. Durette's participation on the 2004 phone call, as it acknowledged that in its opening statement.

The Court disagrees with Merck and finds the evidence clearly supports imputing Dr. Durette's conduct to Merck. Dr. Durette appeared at the deposition as Merck's designated 30(b)(6) corporate representative on issues related to the prosecution of the '499 Patent, including all reasons for amending any pending claim during prosecution. At the deposition, Dr. Durette was represented by Merck's outside counsel and leading up to the deposition, Dr. Durette met with Merck's outside and inside counsel for two full days of preparation, totaling 12 to 14 hours. Moreover, although Dr. Durette was outside the subpoena power of the Court, and Merck voluntarily brought Dr. Durette to trial on its behalf. Additionally, Merck presented Dr. Durette's testimony on direct examination to support its claim of patent validity. Finally, Merck's argument that it openly acknowledged Dr. Durette's participation in the 2004 phone call overlooks that in the very next sentence, its counsel told the jury that Dr. Durette appeared on the phone call because he did not know the compound that was going to be disclosed was within the scope of the Merck patent applications he was working on which turned out to be false. Thus, through Dr. Durette, Merck directed, advised, guided, and covered up misconduct and Merck argued on behalf of Dr. Durette throughout this proceeding. Accordingly, Dr. Durette's conduct may be imputed to Merck.

Moreover, the record amply supports the conclusion that while Dr. Durette was employed by Merck, his conduct was supervised by his managers. He testified that he had a pre-call meeting with his supervisor to discuss whether his HCV patent work would overlap Pharmasset's compound and during the 2004 call, he declared he would have to discuss the same issue with his supervisor. The only reasonable inference that can be drawn is that Dr. Durette continued to prosecute the '499 Patent under the direction of Merck.

Fifth, Merck argues that there is no immediate and necessary relation between the asserted claims and alleged misconduct. Merck claims that to prevail on its unclean hands defense, Gilead must show that the alleged misconduct (1) directly related to the claims Merck asserts in the present suit, and (2) as a result Gilead suffered injury. Merck Proposed COL ¶78 (citing *Hynix*, 897 F. Supp. 2d at 978). Merck's reliance on *Hynix* is not persuasive. *Hynix* did not establish a two-step test for showing the "immediate and necessary relation" component of unclean hands. Instead, the Court was reiterating the notion that misconduct must relate to the party asserting the defense and cannot be some general wrongdoing. See *id.* (citing *Dream Games of Ariz. Inc.* v. *PC Onsite*, 561 F.3d 983, 990 (9th Cir. 2009)). In *Dream Games*, the Ninth Circuit re-emphasized that under the longstanding principal of unclean hands, misconduct must relate to the party asserting the defense. *Id.*; see also *Republic Molding Corp.* v. *B.W. Photo Utilities*, 319 F.2d 347 (9th Cir. 1963) ("What is material is not that the plaintiff's hands are dirty, but that he dirtied them in acquiring the right he now asserts, or that the manner of dirtying renders inequitable the assertion of such rights against the defendant. As Professor Chafee suggests

. . . , we should not by this doctrine create a rule comparable to that by which a careless motorist would be 'able to defend the subsequent personal injury suit by proving that the pedestrian had beaten his wife before leaving his home.'"). Here, as the Court has explained, the misconduct relates directly to Gilead as it involves Merck's misconduct with respect to Pharmasset and this litigation.

Furthermore, the thrust of Merck's argument is that Gilead did not suffer any harm because Merck did not obtain patent coverage that it would not have otherwise obtained. Merck Proposed COL ¶ 79, ECF 407. However, this argument would have the effect of imposing a nonexistent materiality requirement onto unclean hands and further reveals the flaw in Merck's interpretation of the "immediate and necessary relation" component of unclean hands. While misconduct must relate to the asserted claims, which it does in this case, the misconduct does not have to be material. See *Therasense*, 649 F.3d at 1287 ("This court recognizes that the early unclean hands cases do not present any standard for materiality."). As a result, the Court finds Merck's argument is nothing more than an attempt to import a materiality requirement into unclean hands that would be inconsistent with Supreme Court authority.

Sixth, Merck argues that the '712 Patent is not unenforceable due to unclean hands. Merck claims that its in-house patent prosecutor, Mr. Jeffrey Bergman began working on the '712 Patent in 2011 and was responsible for narrowing the original claims. Since Mr. Bergman narrowed the amended claims and there is no evidence that Mr. Bergman engaged in misconduct, Merck argues there is no immediate and necessary relation between Dr. Durette's misconduct and the prosecution of the '712 Patent.

Contrary to Merck's argument, Merck and Dr. Durette's intentional litigation misconduct casts a darkness on this entire case that covers both patents-in-suit. Dr. Durette played a key role in the prosecution of both the '499 and '712 Patents. He was responsible for filing the application that eventually matured as the '712 Patent and this application shares the same specification as the '499 Patent. Although Merck cites several cases in support of its argument that the '712 Patent is not affected by the misconduct, these cases deal with starkly different factual situations. In all of Merck's cases, one party is trying to allege that misconduct related to a patent not-in-suit should give rise to unclean hands to an asserted patent. See, *e.g.*, *Advanced Magnetic Closures, Inc.* v. *Rome Fastener Corp.*, 2006 WL 3342655, at *1-2 (S.D.N.Y. Nov. 16, 2006) (rejecting unclean hands defense predicated on the wrongful assertion of other patents not involved in the litigation); *MedPointe Healthcare Inc.* v. *Hi-Tech Pharmacal Co.*, 380 F. Supp. 2d 457, 466 (D.N.J. 2005) (rejecting an assertion of unclean hands that at best involved plaintiff's failure to disclose a prior ruling on a different, though related, patent, which was not the patent involved in the litigation); *Hoffman-La Roche, Inc.* v. *Promega Corp.*, 319 F. Supp. 2d 1011 (N.D. Cal. 2004) (rejecting unclean hands defense predicated on non-asserted patent). Here both the '499 and '712 Patents were asserted in this case; Merck and Dr. Durette's litigation misconduct infected this entire case, covering both patents-in-suit. Moreover, it would be an odd result, to say the least, if Merck could engage in the substantial litigation misconduct exhibited in this case, yet face no penalty because the '712 Patent was deemed uncontaminated.[5]

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[5] The Court's finding of improper business conduct related to the

In sum, the Court concludes that Dr. Durette knowingly misled Pharmasset regarding his status as being within the firewall at the March 17, 2004, due diligence call. Merck approved this misconduct both before and after the March 17, 2004, call by initially assigning its HCV patent attorney to handle the Pharmasset due diligence work and thereafter, when Dr. Durette ceased his due diligence work on Pharmasset's compound, directing him to remain active in prosecuting Merck's overlapping HCV patent docket after Dr. Durette obtained the highly confidential Pharmasset PSI-6130 disclosure. Moreover, the Court concludes that Dr. Durette intentionally fabricated testimony in this case and that Merck supported that bad faith conduct.

D. Balance of Equities

The last step of the unclean hands analysis is to balance the equities. "The Supreme Court has emphasized, however, that the doctrine of unclean hands 'does not mean that courts must always permit a defendant wrongdoer to retain the profits of his wrongdoing merely because the plaintiff himself is possibly guilty of transgressing the law.'" *Northbay Wellness Grp., Inc.* v. *Beyries*, 789 F.3d 956, 960 (9th Cir. 2015) (quoting *Johnson* v. *Yellow Cab Transit Co.*, 321 U.S. 383, 387 (1944)). As the Ninth Circuit has explained:

> Unclean hands . . . does not stand as a defense that may be properly considered independent of the merits of the plaintiff's claim. . . . In the interests of right and justice the court should not automatically condone the defendant's infractions because the plaintiff is also blameworthy, thereby leaving

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March 2004 call was not considered by the Court in determining whether unclean hands prevented enforcement of the '712 Patent.

> two wrongs unremedied and increasing the injury to the public. Rather[,] the court must weigh the substance of the right asserted by plaintiff against the transgression which, it is contended, serves to foreclose that right. The relative extent of each party's wrong upon the other and upon the public should be taken into account, and an equitable balance struck. The ultimate decision is whether the deception actually caused by plaintiff as compared with the trading methods of the defendant warrant punishment of the plaintiff rather than of the defendant.

Republic Molding, 319 F.2d at 350.

Although there is no precise set of criterion for such balancing, courts have generally considered the weight of wrongdoing of one party against the wrongdoing of the other. For example, in *Hoffman-La Roche*, the Court considered the number of false statements made by the patentees in prosecuting their patents and found the balance of the equities did not favor the patentees. 319 F. Supp. 2d at 1015-16. In *Dunlop-McCullen* v. *Local 1-S*, 149 F. 3d 85, 92-93 (2d Cir. 1998), a case under the Labor-Management Reporting and Disclosure Act, the court denied defendant's request to bar suit under the doctrine of unclean hands where the parties' wrongful conduct was remarkably similar in quality and extent but where, on balance, the court found that defendant's conduct was more significant so that the plaintiff was permitted to proceed with the suit. In *Northbay Wellness*, a bankruptcy case where a creditor sought by adversary proceeding to obtain a finding that a debt was nondischargeable based on theft, the Ninth Circuit was faced with balancing the seriousness of, on the one hand, an attorney's theft from his client of funds that led to his disbarment

against, on the other hand, illegal marijuana sales by the other party. 789 F.3d at 960-61. Reversing the lower court, the Ninth Circuit held that the lower court had failed to conduct this balancing test and determined that unclean hands would not bar Northbay from its suit because, on balance, Northbay's board member, shared in its wrongdoing and his own culpability for theft of client funds was so egregious as to harm both Northbay and the public. *Id.*

In this case, Gilead is guilty of patent infringement. It admitted so much in response to Merck's motion for summary judgment, and on that basis, the Court granted summary judgment of infringement against Gilead. ECF 214. By contrast, Merck has engaged in business misconduct and litigation misconduct that the Court has found to be egregious.

As to Gilead's misconduct, it goes without saying that patent infringement is serious. However, in virtually every patent case where unclean hands is asserted, it comes on the heels of an infringement finding. See *Keystone*, 290 U.S. at 242; *Hazel-Atlas*, 322 U.S. 241-42; *Precision*, 324 U.S. at 814.

Merck raises a number of arguments to demonstrate that its conduct was less culpable than Gilead's. First, and foremost, Merck argues that Gilead's claim of unclean hands is weak. As described in detail above, the Court disagrees. The Court has determined that Merck engaged in a pervasive pattern of misconduct amply support by the evidence.

Merck further argues that there is no evidence that it intended to deceive Gilead or the Court. Again, the Court has found otherwise. From the evidence, it is clear to the Court that Merck's conduct during the Merck-Pharmasset discussions of allowing Dr. Durette to partic-

ipate and assuring Merck, albeit falsely, that Dr. Durette was firewalled, its decision to allow Dr. Durette to continue to prosecute Merck's own HCV patent portfolio in violation of the firewall requirements and its own policy, its tainted judgment in amending the '499 claims 18 days after the Clark application published, its litigation misconduct including Dr. Durette's lying at his deposition, recanting that testimony at trial without proper prior notice to Gilead, and further untruthful testimony at trial all support the Court's conclusion that Merck did intend to deceive Gilead and the Court.

Next, Merck argues that the events in 2004 are irrelevant. Merck claims that Pharmasset knew that its PSI-6130 infringed Merck's patent applications. The Court has not made such a factual finding and on the record before it, cannot do so. Although there was evidence that Merck told Pharmasset that it did not have freedom to operate and that Jeremy Clark used the '499 Patent application to inform his lab work in developing PSI-6130, the evidence further shows that Pharmasset rejected Merck's accusations and that it reviewed the '499 application in order to expressly stay clear of infringement. On this record, the Court does not find the 2004 events irrelevant.

Merck further argues that it did not engage in misconduct before the PTO. While true, good behavior in one setting does not absolve Merck's misconduct in this setting. Additionally, unlike the inequitable conduct defense, misconduct is not limited to the PTO forum. *Therasense*, 649 F.3d at 1287.

Merck argues that Gilead was not harmed by its conduct. But this argument does not align with case law. The balancing of the equities analysis is not limited to the private harm caused by the misconduct. To say other-

wise would impose a materiality requirement where there is none. *Id.* Rather, the focus is on the transgressions of both parties, to make sure that two wrongs are not left unpunished against the public interest. Even assuming that Merck is correct on this point, there was a significant public harm regarding false testimony and improper business conduct that permeated this suit.

Merck also argues that barring it from suit against Gilead is far too severe a penalty for its conduct. The Court acknowledges that the jury's damages award demonstrates the significance of the rights at risk. Taking that into account, however, it is the Court's determination that, on balance, Merck's persistent misconduct involving repeated fabricated testimony and improper business conduct outweigh its right to maintain this suit against Gilead.

As oft repeated, Learned Hand stated:

> The doctrine is confessedly derived from the unwillingness of a court, originally and still nominally one of conscience, to give its peculiar relief to a suitor who in the very controversy has so conducted himself as to shock the moral sensibilities of the judge. It has nothing to do with the rights or liabilities of the parties; indeed the defendant who invokes it need not be damaged, and the court may even raise it sua sponte.

Saudi Basic Indus. Corp. v. *ExxonMobil Corp.*, 401 F. Supp. 2d 383, 392-93 (D.N.J. 2005) (quoting *Gaudiosi* v. *Mellon*, 269 F.2d 873, 882 (3rd Cir. 1959)). For the foregoing reasons, a balance of the equities favors Gilead, and thus, the Court concludes that Gilead has proven its defense of unclean hands by clear and convincing evidence.

VI. CONCLUSION

Candor and honesty define the contours of the legal system. When a company allows and supports its own attorney to violate these principles, it shares the consequences of those actions. Here, Merck's patent attorney, responsible for prosecuting the patents-in-suit, was dishonest and duplicitous in his actions with Pharmasset, with Gilead and with this Court, thus crossing the line to egregious misconduct. Merck is guilty of unclear hands and forfeits its right to prosecute this action against Gilead.

VII. ORDER

For the foregoing reasons, IT IS HEREBY ORDERED that Merck is barred from asserting the '499 and '712 Patents against Gilead and Merck shall take nothing by this suit.

IT IS SO ORDERED.

Dated: June 6, 2016

/s/ Beth Labson Freeman
Beth Labson Freeman
United States District Judge

APPENDIX C
UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

NO. 13-CV-04057-BLF

GILEAD SCIENCES, INC.,
Plaintiff,

v.

MERCK & CO, INC., *et al.*,
Defendants.

ORDER DENYING GILEAD'S MOTION FOR JUDGMENT AS A MATTER OF LAW AND ENTERING FINAL JUDGMENT

Decided: August 16, 2016

On consideration of Gilead's Motion for Judgment as a Matter of Law (ECF No. 432), it is hereby ORDERED that Gilead's Motion is DENIED as moot, because the Court has previously held that unclean hands "renders Merck's '499 and '712 Patents unenforceable against Gilead." ECF No. 422; cf. Wright & Miller, 13 B Fed. Prac. & Proc. Juris. §3533 (3d ed.) ("When a court grants full relief on one ground, it may refer to an alternative ground that might support the same relief as moot."). This resolves all pending issues except for a collateral

matter—the amount of attorney's fees that should be awarded to Gilead. Final judgment is hereby entered.

IT IS SO ORDERED.

Dated: August 16, 2016

/s/ Beth Labson Freeman
Beth Labson Freeman
United States District Judge

APPENDIX D
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

NOTE: This order is nonprecedential.

NO. 2018-1017

GILEAD SCIENCES, INC.,

Plaintiff-Appellee,

v.

MERCK & CO., INC., MERCK SHARP & DOHME CORP., ISIS PHARMACEUTICALS, INC.,

Defendants-Appellants.

Appeal from the United States District Court for the Northern District of California in No. 5:13-cv-04057-BLF, Judge Beth Labson Freeman.

Decided: July 6, 2018

ON MOTION

Before PROST, *Chief Judge*, NEWMAN, and REYNA, *Circuit Judges*.

REYNA, *Circuit Judge*.

ORDER

The court construes Appellants' letter, received May 9, 2018, as a joint motion for summary affirmance.

In light of this court's decision in *Gilead Sciences, Inc.* v. *Merck & Co.*, 2016-2302, -2615, the parties agree that summary affirmance of the district court's attorney fee ruling in the same case is warranted.

Upon consideration thereof,

IT IS ORDERED THAT:

(1) The stay is lifted.

(2) The motion for summary affirmance is granted.

(3) Each side shall bear its own costs.

FOR THE COURT

/s/ Peter R. Marksteiner
Peter R. Marksteiner
Clerk of Court

APPENDIX E

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

NO. 13-CV-04057-BLF

GILEAD SCIENCES, INC.,

Plaintiff,

v.

MERCK & CO., INC., *et al.*,

Defendants.

ORDER REGARDING GILEAD'S ENTITLEMENT TO ATTORNEYS' FEES PURSUANT TO 35 U.S.C. § 285

[Re: ECF 434]

Decided: August 11, 2016

Before the Court is Gilead's motion for attorneys' fees pursuant to 35 U.S.C. § 285. At the August 4, 2016 hearing on the motion, the Court informed the parties that it would first decide Gilead's entitlement to attorneys' fees and if warranted, would allow the parties to submit further briefing on the amount of attorneys' fees. For the reasons stated below, the Court finds Gilead is entitled to attorneys' fees under 35 U.S.C. § 285.

I. BACKGROUND

The facts are well known to the parties and the Court need not recite them in detail here. See *Gilead Scis., Inc.* v. *Merck & Co, Inc.*, Case No. 13-cv-04057-BLF, 2016 WL 3143943, at *1-21 (N.D. Cal. June 6, 2016) (discussing history of this litigation). In brief, based on the Court's claim construction, Gilead conceded that it infringed Merck's U.S. Patents Nos. 7,105,499 (the "'499 Patent") and 8,481,712 (the "'712 Patent"). Gilead's Opp. to SJ at 1, ECF 175. This matter proceeded to a jury trial on the issue of whether the '499 and '712 Patents were invalid. ECF 305, 306, 307, 324, 325, 327, 348, 349. On March 22, 2016, the jury found the patents were not invalid, and on March 26, 2016, the jury awarded Merck $200 million in damages. Verdict Phase 1, ECF 388; Verdict Phase 2, ECF 392.

Thereafter, the Court held a bench trial on Gilead's equitable defenses of unclean hands and waiver. ECF 401. The Court determined that Gilead had not proven its defense of waiver, *Gilead*, 2016 WL 3143943, at *23, but that based on Merck's numerous unconscionable acts, including lying, unethical business conduct, and litigation misconduct, the doctrine of unclean hands barred Merck from asserting the '499 and '712 Patents against Gilead, *id.* at *23-*39. Gilead now seeks attorneys' fees.

II. LEGAL STANDARD

"The court in exceptional cases may award reasonable attorney fees to the prevailing party." 35 U.S.C. § 285. In Octane Fitness, the Supreme Court explained that an exceptional case "is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Octane Fitness, LLC* v.

ICON Health & Fitness, Inc., 134 S. Ct. 1749, 1756 (2014).

"District courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances." *Octane Fitness*, 134 S. Ct. at 1756; see also *Eon-Net LP* v. *Flagstar Bancorp*, 653 F.3d 1314, 1324 (Fed. Cir. 2011) ("[W]e are mindful that the district court has lived with the case and the lawyers for an extended period."). In considering the totality of the circumstances, the Supreme Court suggested that district courts could consider 'nonexclusive' factors it previously set forth concerning a similar provision in the Copyright Act, including "frivolousness, motivation, objective unreasonableness (both in the factual and legal components of the case) and the need in particular circumstances to advance considerations of compensation and deterrence." *Octane Fitness*, 134 S. Ct. at 1756 n.6 (citing *Fogerty* v. *Fantasy, Inc.*, 510 U.S. 517, 534 (1994)). A movant must establish its entitlement to attorneys' fees under §285 by a preponderance of the evidence. *Id.* at 1758.

III. DISCUSSION

Merck does not dispute that Gilead is the prevailing party and that the circumstances of this case are "exceptional."[1] Opp. 1, ECF 444. Merck, however, argues that Gilead should not be awarded attorneys' fees because the Court has already precluded Merck from recovering $200 million from Gilead's past infringement of the '499 and '712 Patents and recovering a running royalty for any future infringement. *Id.* at 3. According to Merck, this

[1] The Court recognizes that Merck intends on appealing the order on unclean hands, and acknowledges that Merck reserves the right to contest whether this case is exceptional should that order be changed on appeal. Opp. 1, ECF 444.

judgment substantially punishes its past and deters any future egregious misconduct, while also substantially compensating Gilead. *Id.* Gilead responds that Merck should not be able to avoid an award of attorneys' fees simply because its misconduct impacted the judgment. Reply 5, ECF 450.

In determining whether to award Gilead fees, the Court must determine whether the main purpose behind §285 is to deter misconduct. In *Kilopass Tech*, the Federal Circuit analyzed the statutory and legislative history of the §285 and stated that "it is clear that the aim of §285 is to compensate a defendant for attorneys' fees it should not have been forced to incur." *Kilopass Tech.* v. *Sidense Corp.*, 738 F.3d 1302, 1313 (Fed. Cir. 2013). Although *Kilopass* was decided before the Supreme Court's decision in *Octane Fitness*, the Court finds its reasoning consistent with *Octane Fitness*. If §285 were designed solely as a penalty provision, Merck's argument that foregoing the $200 million jury verdict and future royalties provides a more than adequate deterrent effect might be persuasive. It is, however, more akin to a fee shifting mechanism in exceptional cases while enhanced damages under §284 are solely punitive. See, *e.g.*, *Nilssen* v. *Wal-Mart Stores, Inc.*, Case No. 04-cv-5363, 2008 WL 5087967, *2 (N.D. Ill. Nov. 24, 2008), aff'd without opn., 2010 WL 1804138 (Fed. Cir. May 6, 2010) (nonprecedential) ("With respect to the exercise of discretion in awarding fees, plaintiffs complain that they have been punished enough . . . This argument loses sight of the primary purpose of §285 litigation: to compensate defendants who are forced to incur significant expenses in the defense of cases that never should have been brought in the first place."); *Fla. Prepaid Postsecondary Educ. Expense Bd.* v. *Coll. Sav. Bank*, 527 U.S. 627, 648 n.11

(1999) (describing § 284 as "punitive damages"). Looked at this way, the Court finds that the case is exceptional and thus, Gilead is entitled to relief from its hefty fee obligation incurred in defending this case.

Furthermore, in Octane Fitness, the Supreme Court highlighted a non-exclusive list of factors from the copyright context to determine whether a case was exceptional. *Octane Fitness*, 134 S. Ct. at 1756 n.6. In some cases, the Court noted the need to advance considerations of compensation *and* deterrence. *Id.* (emphasis added). Merck's position would serve to emphasize deterrence at the expense of compensation and force Gilead to be liable for defending an action in which the record demonstrated egregious misconduct. By awarding Gilead attorneys' fees, both considerations of compensation and deterrence are advanced, consistent with *Octane Fitness* and § 285.[2]

IV. ORDER

For the foregoing reasons, IT IS HEREBY ORDERED that Gilead's motion for attorneys' fees is GRANTED. The parties shall meet and confer on a reasonable and appropriate briefing schedule regarding the amount of fees that should be awarded to Gilead. The parties shall submit a proposed stipulated briefing schedule on or before August 18, 2016.

IT IS SO ORDERED.

Dated: August 11, 2016

/s/ Beth Labson Freeman
Beth Labson Freeman
United States District Judge

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[2] Since the purpose of § 285 is to compensate a party for incurring legal fees, the Court leaves open the question of whether Gilead should be compensated at the lodestar amount or at the amount it actually spent on attorneys' fees.

APPENDIX F

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

NO. 13-CV-04057-BLF

GILEAD SCIENCES, INC.,

Plaintiff,

v.

MERCK & CO., INC., *et al.*,

Defendants.

ORDER RE AMOUNT OF REASONABLE ATTORNEYS' FEES

[Re: ECF 427]

Decided: July 14, 2017

Gilead Sciences, Inc.'s ("Gilead") fees motion arises out of the unusual circumstance of Merck & Co., Merck Sharp and Dohme Corp. and Isis Pharmaceuticals, Inc.'s (collectively, "Merck") successful and significant jury verdict of $200 million for patent infringement having been set aside by this Court on a finding of unclean hands. Thereafter, the Court found the case to be exceptional under 35 U.S.C. § 285 and granted Gilead's motion for attorneys' fees. Currently pending before the Court

are the parties' briefs regarding calculation of reasonable attorneys' fees.

Gilead requests a fee award based on its lodestar calculation. It seeks fees for its counsel Fish & Richardson P.C.'s ("Fish") 25,000 hours expended at hourly rates charged by its attorneys totaling $14,173,500. Gilead also requests payment of fees charged by Deloitte Review Services ("Deloitte") in the amount of $1,365,740. Gilead thus asks for a total fee award of $15,538,970.

Merck contends that the hours expended and the attorney staffing were unreasonable and that the lodestar amount should be significantly reduced. It also argues that Gilead is entitled to only the fees it incurred, which by operation of a contractual fee arrangement was capped at a lower amount for a significant portion of the case. Merck proposes a reduction of $3,360,952.46, or alternatively, a reduction of at least $4,100,773.19.

I. BACKGROUND

The Court has provided a detailed factual background of this case in its order from June 6, 2016. *Gilead Scis., Inc.* v. *Merck & Co, Inc.*, Case No. 13-cv-04057-BLF, 2016 WL 3143943, at *1-21 (N.D. Cal. June 6, 2016) (discussing history of this litigation). Therefore, the Court limits its background discussion to certain procedural history and a description of the fee agreements at issue.

Gilead's Sovaldi® and Harvoni® are transformative drugs offering a near perfect cure for Hepatitis C (HCV) infection. These drugs, which are orally-administered for 12 weeks, replaced the injection-based predecessor treatments that required 12 to 18 months of chemotherapy with modest cure rates of less than 25%. Sofosbuvir is the active ingredient in Gilead's Sovaldi® and Harvoni®. Merck asserted two of its patents, U.S. Patent No.

7,105,499 and U.S. Patent No. 8,481,712, that cover Sofosbuvir, against Gilead. Merck Cross Compl.

At summary judgment, Gilead conceded that if Merck's patents were not invalid, it infringed them. The Court granted summary judgment of infringement. ECF 214. This matter then proceeded to a jury trial on the issue of whether the patents asserted by Merck were invalid based on lack of written description and lack of enablement and on the issue of damages for infringement. ECF 305, 306, 307, 324, 325, 327, 348, 349. On March 22, 2016, the jury found the patents were not invalid, and on March 26, 2016, the jury awarded Merck $200 million in damages. Verdict Phase 1, ECF 388; Verdict Phase 2, ECF 392.

Thereafter, the Court held a bench trial on Gilead's equitable defenses of unclean hands and waiver. ECF 401. During the bench trial, Gilead argued that Merck's unclean hands barred enforcement of the patents against it because Merck improperly obtained from Pharmasset, Gilead's predecessor-in-interest, the structure of PSI-6130, a chemical compound that eventually led to the development of Sofosbuvir and Merck's patent prosecuting attorney then drafted patent claims covering PSI-6130. Merck then lied about its conduct during this proceeding. Based on the evidence presented, the Court determined that Gilead had not proven its defense of waiver, *Gilead*, 2016 WL 3143943, at *23, but that based on Merck's numerous unconscionable acts, including lying, unethical business conduct, and litigation misconduct, the doctrine of unclean hands barred Merck from asserting the patents against Gilead, *id.* at *23-39. Specifically, the numerous unconscionable acts included lying to Pharmasset, misusing Pharmasset's confidential information, breaching confidentiality and firewall agreements, and

lying under oath at deposition and trial. The Court found that any one of these acts—lying, unethical business conduct, or litigation misconduct—would be sufficient to invoke the doctrine of unclean hands; but together, these acts unmistakably constitute egregious misconduct that equals or exceeds the misconduct previously found by other courts to constitute unclean hands. *Gilead*, 2016 WL 3143943, at *27.

On August 11, 2016, the Court deemed the case "exceptional," and found that an award of reasonable attorneys' fees was warranted. ECF 457. The Court concluded that Gilead should not be "liable for defending an action in which the record demonstrated egregious misconduct" by Merck. *Id.* at 4. In reaching that holding, the Court noted that the purpose behind § 285 is more than just to deter misconduct, but also to compensate defendants who are forced to incur significant expenses in the defense of cases that never should have been brought in the first place.

Now before the Court is Gilead's request for an award of attorneys' fees. Gilead requests a lodestar award based on the hours it reasonably expended litigating this case. Gilead offers evidence showing from November 2013 to present, its counsel Fish & Richardson P.C. ("Fish") billed Gilead in two ways. Singer Decl., ECF 473. Fish billed Gilead on an hourly basis from November 11, 2013 to December 31, 2013 and April 1, 2016 through present. For the intervening period January 1, 2014 through March 31, 2016, Gilead entered into a fixed fee agreement with Fish where the total amount of fees Gilead paid to Fish attributable to the fixed fee agreement was $11,350,000. Ex. B to Rydstrom Decl., ECF 487. The total amount of fees Gilead paid to Fish for work done from November 13, 2013 to June 30, 2016 was

$12,463,422.35. *Id.* Gilead has requested reimbursement for fees it incurred for two entities: Fish and Deloitte (document review). Through June 30, 2016, Fish's fees based on its lodestar calculation totaled $13,890,070. Ex. A to Rydstrom Decl., ECF 477-1. After updating the amount to reflect work since June 30, 2016, including this fee motion, through September 30, 2016, Gilead seeks a total of $14,173,500. Ex. 1 to Singer Decl., ECF 473-1. The lodestar amount for work performed by Deloitte, which remains unchanged, is $1,365,470. Accordingly, Gilead seeks a total of $15,538,970. Opening Br. 1-2, ECF 472.

II. LEGAL STANDARD

The award of attorney fees under 35 U.S.C. § 285 must be reasonable. The Supreme Court has said that "[t]he 'lodestar' figure has, as its name suggests, become the guiding light of our fee-shifting jurisprudence. *City of Burlington* v. *Dague*, 505 U.S. 557, 562 (1992). There is thus "a 'strong presumption' that the lodestar represents the 'reasonable' fee." *Id.* (citation omitted). Ascertaining what constitutes a "reasonable" fee requires determining "the number of hours reasonably expended on the litigation multiplied by a reasonable hourly rate." *Pennsylvania* v. *Del. Valley Citizens' Council for Clean Air*, 478 U.S. 546, 564 (1986). "This calculation provides an objective basis on which to make an initial estimate of the value of a lawyer's services." *Id.* (citing *Hensley* v. *Eckerhart*, 461 U.S. 424, 433 (1983)). Supreme Court "case law construing what is a 'reasonable' fee applies uniformly to all" federal fee shifting statutes that permit the award of reasonable fees. *Dague*, 505 U.S. at 562.

"In determining a reasonable hourly rate, the district court should be guided by the rate prevailing in the community for similar work performed by attorneys of

comparable skill, experience, and reputation." *Chalmers* v. *City of Los Angeles*, 796 F.2d 1205, 1210-11 (9th Cir. 1986), amended on other grounds by 808 F.2d 1373 (9th Cir. 1987) (citing *Blum* v. *Stenson*, 465 U.S. 886, 895 n.11); *Avera* v. *Sec'y of Health & Human Servs.*, 515 F.3d 1343, 1349 (Fed. Cir. 2008) (holding that "to determine an award of attorneys' fees, a court in general should use the forum rate in the lodestar calculation").

In determining a reasonable amount of time spent, the Court should only award fees based on "the number of hours reasonably expended on the litigation" and exclude "hours that are excessive, redundant, or otherwise unnecessary." *Hensley*, 461 U.S. at 433-34. "There is no precise rule or formula for making these determinations." *Id.* at 436. "The court necessarily has discretion in making this equitable judgment." *Id.* at 437. Federal Circuit precedent controls the calculation of attorneys' fees in patent cases. *Bywaters* v. *United States*, 670 F.3d 1221, 1227-28 (Fed. Cir. 2012) ("we have consistently applied our law to claims for attorneys' fees under section 285 of the Patent Act because section 285 relates to an area of substantive law within our exclusive jurisdiction"). However, district courts have "'considerable discretion' in determining the amount of reasonable attorney fees under §285." *Homeland Housewares, LLC* v. *Sorensen Research*, 581 F. App'x 877, 881 (Fed. Cir. 2014) (internal citations omitted).

The party seeking fees bears the initial burden of establishing the hours expended litigating the case and must provide detailed time records documenting the tasks completed and the amount of time spent. *Hensley*, 461 U.S. at 434; *Welch* v. *Met. Life Ins. Co.*, 480 F.3d 942, 945-46 (9th Cir. 2007). "Where the documentation of hours is inadequate, the district court may reduce the

award accordingly." *Hensley*, 461 U.S. at 433. The district court may also exclude any hours that are excessive, redundant, or otherwise unnecessary. *Id.* at 434. However, the party seeking fees need not provide comprehensive documentation to prevail. *Id.* at 437.

III. DISCUSSION

Gilead seeks payment of $14,173,500 for Fish and $1,365,740 for work performed by Deloitte for a total of $15,538,970. Mot. 2. This total includes approximately 25,000 hours of work expended by Fish over 31 months. Singer Decl.; Ex. 1 to Singer Decl., ECF 473-1. Fish documents that 47 timekeepers were involved, including 15 principals/of counsel, 19 associates, and 10 paralegals, and other staff. Ex. 1 to Singer Decl. Fish further documents that the case involved motions for summary judgment, claim construction, discovery motions, motions in limine, an eight-day trial, post-trial motions, extensive bench trial briefs, and this fee motion. This case also involved invalidity and infringement contentions on two patents. Discovery in this case included production of over 7.5 million pages of documents, taking 20 fact depositions, defending 10 fact depositions, expert report preparation for four Gilead expert witnesses, responding to the expert reports of eight Merck expert witnesses, taking nine expert depositions and defending three expert depositions, and filing and responding to multiple motions to compel and other discovery disputes. ECF 452-1. Gilead faced a demand of more than $2 billion for damages and argues that the case was extraordinarily complex. Mot. 3.

Gilead has provided detailed billing records to support its fee request. Additionally at the Court's request, Gilead has provided two charts summarizing at a high level the hours expended by each timekeeper on the major

tasks performed. ECF 474-1, 452-1. These charts provide the Court with a bird's-eye view of the time expended and a depiction of the staging of the case that is impossible to glean from chronological timesheets.

Merck does not dispute the reasonableness of the requested fees attributed to Deloitte's work or the blended rate of $552.05 per hour for Fish's timekeepers. Resp. Br. 1-2, ECF 486. Rather, Merck requests that the lodestar amount be reduced based on its two alternative approaches. *Id.* at 2. First, based on an analysis of the Court's requested table of tasks performed, Merck requests a reduction of 4,946 hours (19.7%) based on excessive hours and duplication of efforts. *Id.* at 3-8. Further, Merck argues that the high ratio of senior to junior attorneys warrants an additional 5.6% reduction of the remaining hours. *Id.* at 9. According to Merck, the first approach supports a reduction of about $3.36 million. The second approach is based on analysis of specific billing entries and proposes a reduction at least $4,100,733.19 in light of the various deficiencies in the entries. *Id.* at 9-14. Lastly, Merck contends that this Court should not award an amount beyond the fees Gilead actually incurred, which is $12,463,422. *Id.* at 14.

In addition, Merck directs its arguments to Fish's lodestar amount of $13,890,070, excluding the additional amount incurred after June 30, 2016, stating that the parties have agreed that the Court should first make an award based on Gilead's original request, and then apply the same percentage reduction to Gilead's request for supplemental fees. Ex. F to Rydstrom Decl., ECF 477-4.

A. Reasonableness of the Hourly Rate

In establishing the reasonable hourly rate, the court may take into account: (1) the novelty and complexity of the issues; (2) the special skill and experience of counsel;

(3) the quality of representation; and (4) the results obtained. *Cabrales* v. *Cnty. of Los Angeles*, 864 F.2d 1454, 1464 (9th Cir. 1988).

Gilead seeks the blended rate of $552.05 per hour. Courts in this district have found comparable rates reasonable in patent cases. *E.g.*, *Kilopass Tech., Inc.* v. *Sidense Corp.*, 82 F. Supp. 3d 1154, 1171 (N.D. Cal. 2015) (finding the rate of $830 per hour to be reasonable for senior partners and rate of $345 per hour to be reasonable for junior associates); *Monolithic Power Sys., Inc.* v. *O2 Micro Int'l Ltd.*, No. 08-04567-CW, 2012 WL 161212, at *3 (N.D. Cal. Jan. 17, 2012) (noting that the partners' median rate was $578 in 2008).

Merck does not dispute the blended rate of $552.05 per hour for Fish's timekeepers. Given the reputation of the law firm, the qualifications and responsibilities of these particular attorneys, the complexity of this case, the outstanding results obtained, the Court finds the blended hourly rate to be "in line with those prevailing in the community for similar services by lawyers of reasonably comparable skill, experience and reputation." *Blum*, 465 U.S. at 896 n.11.

B. Reasonableness of the Hours Expended

The Court now turns to the parties' evidence and arguments directed to the major tasks performed and will determine whether certain percentage reduction of hours by category would be appropriate. As the Ninth Circuit noted, there are two means by which a court may determine whether the number of hours is "reasonable." *Gonzalez* v. *City of Maywood*, 729 F.3d 1196, 1202 (9th Cir. 2013). First, a court may conduct either an "hour-by-hour analysis of the fee request," and exclude those hours for which it would be unreasonable to compensate the prevailing party. *Id.* at 1203 (citing *Gates* v. *Deukme-*

jian, 987 F.2d 1392, 1399 (9th Cir. 1992)). Second, "when faced with a massive fee application the district court has the authority to make across-the-board percentage cuts either in the number of hours claimed or in the final lodestar figure as a practical means of [excluding non-compensable hours] from a fee application." *Id.* (citation omitted). The Ninth Circuit has held that it makes no difference in terms of the final amount to be awarded whether the court applies the percentage cut to the number of hours claimed, or to the lodestar figure. *Id.* Consistent with this principle, the Court proceeds to analyze whether an across-the-board percentage cut should be applied to any category.

i. Duplication of Effort and Unreasonable Number of Timekeepers

Gilead requests fees for the work of 47 timekeepers and Merck argues for a 25% reduction to account for duplication of effort. Merck asserts that it should not be responsible for hours spent in connection with motions for summary judgment because it was the prevailing party on these motions and Gilead did not substantively oppose Merck's motions. Resp. Br. 3-4. Alternatively, Merck contends that a 25% reduction should be applied to the hours devoted to motions for summary judgment. *Id.* at 4. With respect to many other categories, such as infringement and invalidity contentions, claim construction, post-trial motions and proceedings, and discovery – case management and strategy, Merck argues that Gilead fails to justify the number of timekeepers and hours. *Id.* at 4-7. Merck then proposes a 25% reduction for each of those categories. *Id.* at 5. As for discovery – document review, Merck asserts that time spent on training, supervision, and quality control was not uniformly reduced to account for the related pending litigation and there is no

reliable way of parsing the time attributed to this litigation based on Fish's inconsistent billing practices. *Id.* at 5-6. Lastly, with respect to defending fact depositions, Merck claims that Gilead refused Merck's request to break down the hours spent by deponent. *Id.* at 7.

Gilead responds that Merck's objection on the basis of duplication of efforts and unreasonable number of timekeepers is arbitrary and unsubstantiated, merely targeting categories with at least eight timekeepers who billed more than ten hours. Opening Br. 5-6. Gilead contends that Merck ignores the magnitude of case, in which Merck was seeking more than $2 billion in past damages and billions more in future royalties. *Id.* at 3, 6. Specifically, Gilead contends that Merck's proposed reductions fail to take into account the level of staffing necessary in this case as compared to a case with less than $5 million at stake. *Id.* at 6 (citing to *Bywater*, 670 F.3d at 1231). According to Gilead, Merck's assertion that "Discovery – Case Management and Strategy" should only be entitled to 7-10% of discovery-related expenses is also unsupported. *Id.* at 8. As to the amount spent on document review, Gilead claims that its requested amount has already been reduced by two-thirds because counsel was working on two other related cases. *Id.* at 7-8.

Once a determination that a case is "exceptional" has been made, 35 U.S.C. § 285 means to "make whole a party injured by an egregious abuse of the judicial process." *Mathis* v. *Spears*, 857 F.2d 749, 758 (Fed. Cir. 1988). Full fees may not be warranted only in the following circumstances: (1) when litigation misconduct is the sole basis for deeming a case "exceptional," and (2) cases where the injured party only partially prevails on the patent claims at issue. *Beckman Instruments, Inc.* v. *LKB Produkter AB*, 892 F.2d 1547, 1553-54 (Fed. Cir. 1989). Neither

condition is present here, thus the Court finds that a full assessment of reasonable fees is appropriate, as discussed below.

a. Motions for Summary Judgment

Gilead requests compensation for 420.2 hours in the category of "Summary Judgment Motions" and Merck proposes a 25% percent reduction in this category. With respect to Merck's objection relating to Gilead's lack of substantive opposition to Merck's motion for summary judgment, the Court first underscores that it has previously found that Merck's misconduct "infected this entire case." ECF 422 at 60-61. Merck's misconduct also required Gilead to expend significant effort analyzing the trial and discovery record to demonstrate Merck's inconsistent and false testimony. Reply 2. Gilead has also ultimately prevailed on every claim asserted by Merck so the exception in *Beckman* does not apply. In *Monolithic Power Sys., Inc.* v. *O2 Micro Int'l Ltd.*, the court found the patentee's extensive misconduct "severely affected every stage of the litigation that a full award of attorney fees was proper." 726 F.3d 1359, 1369 (Fed. Cir. 2013). Specifically, the court noted that the lower court found that the patentee's misconduct began even before the complaint was served, and took on many forms throughout the litigation. *Id.* Similarly here, the Court found that Merck's misconduct began pre-suit with its prosecuting patent attorney, affected the development of the claims in the patents-in-suit, and permeated throughout the litigation of the case. Further, the Federal Circuit has declined to require a level of granularity that traces attorneys' fees to specific acts of litigation misconduct, as Merck is proposing here. *Homeland Housewares*, 581 F. App'x at 881. Instead, it is the "totality of the circumstances" that justifies this Court's award of fees. *Id.*

As to Merck's objection to sixteen timekeepers billing to this category including ten who billed at least ten hours, the Court finds this objection and the supporting expert declaration to be conclusory. Resp. Br. 4; Pierce Decl. 9-10. Gilead has met its initial burden by producing time entries in support of the lodestar amount and Merck fails to explain why the particular numbers of timekeepers and hours billed are excessive. Accordingly, the Court finds that the across-the-board reduction proposed by Merck for motions for summary judgment is not justified. Moreover, barring any other reasons for reductions of hours, the Court is satisfied that devoting 420.2 hours to research, briefing, and arguing the motions for summary judgment is reasonable, regardless of the number of attorneys tasked to the project.

b. Discovery – Document Review – Gilead Documents

Gilead requests compensation for 3,452.2 hours devoted to reviewing Gilead's documents for production and argues that the number of hours has already been reduced to account for the work done in two other related cases. Nonetheless, Merck argues that a two-thirds reduction still needs to be made because Fish's inconsistent billing practices preclude proper apportionment among the various pending cases. Resp. Br. 6. Independent from the two-thirds reduction, Merck also urges the Court to reduce the hours by 25% percent for duplication of efforts by excessive number of timekeepers and hours. *Id.* With respect to this category, the Court will not reduce the fees based on Merck's allegations that the hours were not properly reduced to one third to account for work done on related cases. Although Gilead might have adopted different practices for allocating the hours among the three related cases, this alone does not prove

inaccuracies, unreasonableness, or inflation of the time spent. Ex. C to Rydstrom Decl., ECF 477-2 (explaining how hours were allocated among related cases). For those hours that were devoted exclusively to this case, there is also nothing improper in including all hours instead of one-third of those hours. Ex. D to Rydstrom Decl., ECF 477-3 (noting that "much of the time categorized as "Document Review – Gilead Docs" pertains to substantive work related exclusively to the Merck case (which should not be divided in thirds))." With regard to duplication of efforts, Merck's argument is conclusory and fails to demonstrate that the number of timekeepers and hours are excessive. Thus, the Court declines to reduce the amount by 25% or any lesser amount.

c. Discovery – Fact Depositions – Defended

Gilead requests compensation for 1,503.2 hours for defending fact depositions and Merck proposes a 25% percent reduction in this category. As to this category, the Court finds that the 25% reduction is warranted because by refusing to break down the hours spent by deponent, Gilead has not enabled Merck and this Court to evaluate the reasonableness of the hours. Ex. G to Rydstrom Decl. Gilead explains that the work on fact depositions often related to multiple witnesses so there was not an accurate way to sub-divide the work. *Id.*; Reply 2 n.2. However, a party seeking fees "should maintain billing time records in a manner that will enable a reviewing court to identify distinct claim." *Norris* v. *Sysco Corp.*, 191 F.3d 1043, 1052 (9th Cir. 1999); see also *Minor* v. *Christie's, Inc.*, No. 08-05445-WHA, 2011 WL 902235, at *15 (N.D. Cal. Jan. 29, 2011) (reducing the amount by 25% to take into account possible excessive, duplicative, or irrelevant time because the record did not have enough information to determine whether the overall fee

request for this project is reasonable). Accordingly, the Court applies a reduction of 25% or 375.8 hours. With a blended rate of $552.05 per hour, the reduced amount is about $207,460.39.

d. Infringement and Invalidity Contentions; Claim Construction; Post-Trial Motions and Proceedings; Discovery – Case Management and Strategy; Discovery Document Review – Merck/Isis Documents; Discovery Written Discovery; Discovery – Third Party Discovery; Discovery – Discovery Dispute and Strategy; Discovery Fact Depositions – Taken

Gilead requests compensation for about 10,501 hours in the remaining categories combined. To each of these categories, Merck objects based on excessive number of timekeepers and their hours and correspondingly requests a 25% reduction in each category. However, the Court finds Merck's objections arbitrary and unsupported. A mere comparison between the numbers of timekeepers and hours in this case and those in other cases cited by Merck is not relevant if the amount at stake and the complexity of the cases are different. For example, in contrast to *Stonebrae, L.P.* v. *Toll Bros.*, where specific instances of redundancies and inefficiencies were identified when two firms were billing a significant number of hours for the same tasks, Merck has not supported its proposed reductions with specific examples as to why the hours were excessive. No. 08-0221-EMC, 2011 WL 1334444, at *13 (N.D. Cal. Apr. 7, 2011); *e.g.*, *Kalani* v. *Starbucks Corp.*, No. 13-00734-LHK, 2016 WL 379623, at *9 (N.D. Cal. Feb. 1, 2016) (noting that "Defendant's contention that Plaintiff's fees for trial preparation and trial

are excessive are unsupported by identification of any particular unreasonable time entry").

ii. Top-Heaviness: Ratio of Senior to Junior Attorneys

Gilead contends that Merck's assertion that there should be 2:1 allocation of hours between junior attorneys and senior attorneys is unsubstantiated, especially given the magnitude and complexity of the case. Opening Br. 9-10 (citing *Stonebrae*, 2011 WL 1334444, at *13; *Moreno* v. *City of Sacramento*, 534 F.3d 1106, 1115 (9th Cir. 2008)).

Merck claims that work performed on this case was divided almost evenly between senior attorneys and junior attorneys. Resp. Br. 9; see Pierce Decl. 7-10., ECF 488 (stating that 2:1 is a reasonable ratio). It argues that even in a complex case, not every task would require the attention of senior attorneys. Resp. Br. 9 (citing *Hernandez* v. *Taqueria El Grullense*, No. 12-03257-WHO, 2014 WL 2611214, at *3 (N.D. Cal. June 11, 2014)).

Although Merck has proffered 2:1 as the reasonable ratio of hours spent by associates to those spent by partners, the Court declines to adopt a single ratio across the board because the ratio can vary depending on the case and the task. The Court is also not persuaded that certain research or writing tasks, such as motions to compel, should be categorically delegated to junior attorneys, because the "[u]se of more experienced attorneys for certain tasks can be more efficient than deploying less senior attorneys." *Stonebrae*, 2011 WL 1334444, at *13. Nevertheless, Merck has pointed to one persuasive example where a partner was billing a substantial number of hours to what should be a routine and simple task – 515.3 of partner hours in "Document Review – Gilead Docs." Resp. Br. 9; see Pierce Decl. 31-33. While it is

desirable for a senior attorney to draft document review protocols and to supervise document review, over 500 hours billed by a partner in this document review category is excessive. *Hernandez*, 2014 WL 2611214, at *2 (reducing hours spent because "highly skilled attorney billed excessive hours for routine and duplicative work"). Accordingly, the Court reduces 40% of the hours for that partner timekeeper in this category of "Document Review – Gilead Docs," a reduction of 206.12 hours. Multiplied by the agreed-upon blended rate of $552.05 per hour, the reduction is about $113,788.55.

iii. Entry-Specific Objections

The Court now turns to objections Merck has raised with respect to specific entries. As a preliminary matter, a proper entry-specific objection would justify a further reduction and has been considered so as not to duplicate the reductions in various categories of major tasks made above pursuant to "duplication of effort and number of timekeepers" or "top-heaviness." Where the entry-specific objection is found to relate to an additional reason for reduction that is different than "duplication of effort and number of timekeepers" or "top-heaviness," the Court has made further reductions. Additionally, the Court has carefully reviewed the deductions made in these categories and expressly reduced the percentage deduction to eliminate any potential double counting of reduction in compensable hours.

The Court summarizes here Merck's entry-specific objections and Gilead's corresponding responses before addressing each in turn below.

Merck first raises the objection to hours that are "blocked-billed," claiming that courts routinely apply a 10-30% reduction in fees for block-billed time. Resp. Br. 10 (citing *Welch* v. *Metro. Life Ins. Co.*, 480 F.3d 942, 948

(9th Cir. 2007)). Merck also avers that Fish's block billing entries are not acceptable because descriptions such as "'work on 3rd party discovery,' 'research case tech issue,' and 'participate in call'" for a total of 8.4 hour, do not allow for a determination of how much time was spent on the individual task and whether the amount of time was reasonable. *Id.* Merck further claims that the vague descriptions, such as "work on case facts" or "work on case arguments" are vague, and when repeated many times, hinder its assessment of whether the time spent was reasonable. *Id.* at 11. Merck also objects to timekeeper entries that state "maintaining internal files and dockets" or "retrieving copies of documents," as clerical and administrative. *Id.* at 11-12. Next, Merck objects to attendance by multiple attorneys at depositions, which was not necessary. *Id.* at 12. Lastly, Merck argues that the redacted entries are insufficient to assess the reasonableness of the time spent. *Id.* at 13. According to Merck, even when the entries were rewritten after Merck raised this objection to Gilead, their vagueness and the lack of reliable contemporaneous billing entries still cast doubt on these entries. *Id.* at 13-14.

With respect to "block billing," Gilead argues that this does not warrant a reduction in fees because not only is this a common practice but its counsel's descriptions of the tasks are also specific. Opening Br. 10-11; Reply 5 (citing *Stonebrae*, 2011 WL 1334444, at *9). As to Merck's objections based on redactions of privileged information and vagueness of the entries, Gilead contends that those are not sufficient bases as long as Merck understands the nature of the work and can object to them. *Id.* at 12-14. Gilead further argues that many tasks Merck considered "clerical and administrative" were actually substantive work, such as "assign invalidity re-

search to team." *Id.* at 14-15. Even if the entries reflect non-substantive work done by litigation support staff, Gilead contends that those are still entitled to compensation. *Id.* at 15 (citing *Perfect 10, Inc.* v. *Giganews, Inc.*, No. 11-07098, 2015 WL 1746484, at *20 (C.D. Cal. Mar. 24, 2015)).

On Fish's block-billing, Merck has identified 12,066.78 hours in block-billed entries of more than one hour, corresponding to $6,520,564.20 in fees and seeks a 25% reduction of these fees. Resp. Br. 10. While block-billing is less than ideal in providing a complete record to assess reasonableness, adequate descriptions can still make it acceptable. Here, at least some of the descriptions in the block-billed entries reflect itemized statements of the specific tasks counsel undertook. Such detailed information about the timekeeper's activities can be sufficient for the purpose of evaluating whether the total block-billed hours were reasonable as a whole. *E.g.*, Pierce Decl. 11 (reciting descriptions from one of the block-billed entries: "Work on document production; Draft summary of issues re: search terms and custodian identification; Work on response to discovery letter from Merck; Work on search term and custodian identification; Meet re: third party subpoena and identification of people knowledgeable re: third party; Update case memo."); see also *Stonebrae*, 2011 WL 1334444, at *9 (finding the description sufficient to allow for block-billed entries); *Perfect 10*, 2015 WL 1746484, at *25 (same). Accordingly, the Court finds that those billing entries are sufficiently clear and do not warrant a reduction in fees.

With respect to vague descriptions of work, Merck has identified 1,493.2 hours corresponding to $938,500.10 in vague entries identified in Exhibits G and L-P to Pierce Declaration; and an additional 2,826.59 hours and

$1,560,840.33 in fees that remain vague despite revision as set forth in Exhibit T to Pierce Declaration. Resp. Br. 11, 13. Merck seeks a reduction of about 50% for these entries. *Id.* The Court agrees that some of the descriptions remained vague and finds that a fee reduction is warranted. Descriptions such as "'work on case coordination,' 'work on case strategy issue,' 'work on case facts,' and 'work on case arguments,'" do not provide sufficient information for Merck or this Court to assess whether the hours spent were reasonable. Resp. Br. 11-13; see *Norris*, 191 F.3d at 1052. After reviewing the exhibits provided by Merck, the Court finds that about 40 percent of the hours identified in Exhibits G and L-P are vague. See Resp. Br. 11. Accordingly, the Court finds that as to the request of $938,500.10, a 40% reduction or $375,400 justified for vague entries. Exs. G, L-P to Pierce Decl. As to the requested $1,560,840.33 for vague rewritten entries, the Court finds that 35% of the hours in Exhibit T are attributed to entries that continue to be vague. As such, an additional 35% reduction or $546,294.12 is warranted. Resp. Br. 13; Ex. T to Pierce Decl.

As to the category of billed entries to which Merck objects as clerical or administrative (about 685.01 hours corresponding to $184,967.92 in fees identified by Merck), Resp. Br. 11, the Court finds that some reductions are warranted. *Nadarajah* v. *Holder*, 569 F.3d 906, 921 (9th Cir. 2009) (holding that when "clerical tasks are billed at hourly rates, the court should reduce the hours requested to account for the billing errors"). The Court recognizes that "work performed by litigation support staff that directly support the substantive litigation (as opposed to routine clerical work) is compensable as part of an attorneys' fee award." *Perfect 10*, 2015 WL 1746484, at *20 (noting that hours spent by litigation support staff that

handled electronic information management can justify award of fees). A review of the record reveals that while certain billing entries reflect routine clerical matter, such as maintain files and dockets, others pertain to more substantive support, such as prepare for call relating to invalidity contentions. Ex. Q to Pierce Decl., ECF 488-16; Ex. 3-D to Warden Decl., ECF 474-11; Resp. Br. 11-12. After reviewing the exhibit showing all the entries for the clerical and administrative tasks, the Court finds that 30% of the hours are attributed to entries with descriptions of routine clerical matter. As such, the Court finds that 30% reduction, or about $55,490, is proper for this category.

With respect to the category of hours attributed to two Fish attorneys attending the same deposition, the Court finds those hours appropriate and will not reduce those hours. For certain key witnesses, it is reasonable to send two attorneys to a deposition, at least to ensure that the deposition operates fairly. As also noted by Gilead, the hours identified by Merck that fall into this category, "143 hours out of the 1503 hours," constitute a small portion of the total hours, demonstrating that Fish was staffing efficiently. Reply 7.

As to billing entries that were formerly redacted but were rewritten, the Court finds that as long as the rewritten entries provide sufficient information for Merck to assess their reasonableness, they are appropriate. Resp. Br. 13; Exs. U, V to Pierce Decl. Unlike *J & J Sports Prods., Inc.* v. *Duong*, and other cases Merck relied upon, these billing entries were not entirely reconstructed after services were rendered but were only rewritten to protect privileged information. No. 13-02002-LHK, 2014 WL 1478498, at *3 (N.D. Cal. Apr. 14, 2014).

The basis that the revision is not contemporaneous does not justify a reduction.

C. Lodestar Award

Based on the foregoing analysis of reasonable hours expended, the Court finds that the requested fees should be reduced by $1,298,433.47. The total lodestar for Fish's work is $12,591,636.53 through June 30, 2016.

D. Fixed Fee Agreement

Gilead argues that its attorneys' fees should not be capped by the amount it actually paid its counsel pursuant in part to a fixed fee agreement, which would total $12,463,422.35. Opening Br. 15. It contends that lodestar amount dictates the reasonable amount. *Id.* (citing *Bywaters* v. *United States*, 670 F.3d 1221, 1232 (Fed. Cir. 2012); *Kilopass Tech., Inc.* v. *Sidense Corp.*, 82 F. Supp. 3d 1154, 1168 (N.D. Cal. 2015)).

According to Merck, the requested lodestar amount is $1.4 million more than the fees Gilead actually incurred. Unlike the cases where a contingency recovery persuaded counsel to take on a client who would otherwise have gone unrepresented, Merck argues that this case has a fee agreement negotiated by sophisticated parties and that the agreement is an important factor in determining reasonableness. Resp. 14.

While the Court is not persuaded that the fixed fee agreement should act as an automatic ceiling on the reasonable rate, the Court can take it into account to consider the amount involved to confirm whether the total number of hours expended is reasonable. See *Bywaters*, 670 F.3d at 1232; *Kilopass*, 82 F. Supp. 3d at 1167-79. Through June 30, 2016, Fish's requested lodestar fees total $13,890,070. The reductions set forth above provide a lodestar amount of $12,591,636.53 through June 30, 2016,

which is about a 9.35% reduction from the requested amount. The amount of $12,591,636.53 is also comparable to the total paid amount of $12,463,422 (including the $11,350,000 paid pursuant to the fixed fee agreement and the hourly calculation for the periods before and after the fixed fee period). The Court thus finds the lodestar amount to be reasonable based on the amount at stake in this case, the complexity of the issues, and the results Fish has achieved for Gilead.

IV. ORDER

For the foregoing reasons, IT IS HEREBY ORDERED that:

Gilead is entitled to $12,591,636.53 for the work done by Fish through June 30, 2016.

Since the total amount of reductions is about 9.35% based on Fish's fees through June 30, 2016, the additional fees incurred after June 30, 2016, are subject to the same proportional reduction based on the parties' agreement.

Gilead is also entitled to fees of $1,365,470 for Deloitte's work.

Dated: July 14, 2017

/s/ Beth Labson Freeman
Beth Labson Freeman
United States District Judge

APPENDIX G
UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

NO. 13-CV-04057-BLF/NMC

GILEAD SCIENCES, INC.,
Plaintiff,
v.
MERCK & CO, INC., *et al.*,
Defendants.

BILL OF COSTS

Dated: July 24, 2017

Judgement having been entered in the above entitled action on 06/06/2016 against MERCK & CO, INC., *et al.*, the Clerk is requested to tax the following as costs:

Fees of the Clerk ..... $_____

Fees for service of summons and subpoena 1,324.75

Fees for printed or electronically recorded transcripts necessarily obtained for use in the case ..... ~~14,999.80~~ $9,999.80

Reduction agreed upon by parties.

Fees and disbursements for printing ..... $_____

Fees for witnesses (*itemize on page two*)	262.50
Fees for exemplification and the costs of making copies of any materials where the copies are necessarily obtained for use in the case	~~125,367.43~~ $79,674.90
Reduction agreed upon by parties.	
Docket fees under 28 U.S.C. 1923	
Costs as shown on Mandate of Court of Appeals	
Compensation of court-appointed experts	
Compensation of interpreters and costs of special interpretation services under 28 U.S.C. 1828	
Other costs (*please itemize*) $167,493.95	~~170,193.95~~
Reduction agreed upon by parties.	
TOTAL	~~$ 312,148.43~~ $257,168.65

SPECIAL NOTE: Attach to your bill an itemization and documentation for requested costs in all categories.

Declaration

I declare under penalty of perjury that the foregoing costs are correct and were necessarily incurred in this action and that the services for which fees have been charged were actually and necessarily performed. A copy of this bill has been served on all parties in the following manner:

☑ Electronic service ☐ First class mail, postage prepaid

☐ Other: _____

s/ Attorney: /s Elizabeth M. Flanagan

Name of Attorney: Elizabeth M. Flanagan

For: Gilead Sciences, Inc. Date: 6/20/2016

Name of Claiming Party

Taxation of Costs

Costs are taxed in the amount of $257,168.65 and included in the judgment.

Susan Y. Soong By: /s Tiffany Salinas-Harwell 07/24/2017

Clerk of Court *Deputy Clerk* *Date*

APPENDIX H

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

NO. 13-CV-04057-BLF

GILEAD SCIENCES, INC.,

Plaintiff and Counterdefendant,

v.

MERCK & CO., INC. (Defendant only), MERCK SHARP & DOHME CORP., AND ISIS PHARMACEUTICALS, INC.

Defendants and Counterclaimants.

JOINT STIPULATION AND ~~[PROPOSED]~~ ORDER AWARDING TOTAL AMOUNT OF ATTORNEY FEES AND STAYING ENFORCEMENT OF ORDERS ON FEES AND COSTS

Dated: August 1, 2017

Pursuant to Civil L.R. 7-12, Plaintiff and Counterdefendant Gilead Sciences, Inc. ("Gilead") and Defendant Merck & Co., Inc. and Defendants and Counterclaimants Merck, Sharp & Dohme Corp., and Isis Pharmaceuticals, Inc. ("Merck") hereby stipulate and request that the Court enter an order as follows:

COSTS & ATTORNEYS' FEES

1. Following the Court's Order Regarding Non-Jury Legal Issues, D.I. 422 (June 6, 2016), Gilead filed a bill of costs. D.I. 430 (June 20, 2016). The parties agreed to certain reductions, see D.I. 431 (July 5, 2016), and the clerk subsequently issued an order taxing costs against Merck in the agreed amount of $257,168.65. D.I. 490 (July 24, 2017).

2. Also following the Court's Order Regarding Non-Jury Legal Issues, the Court granted Gilead an award of attorney fees, with the amount to be determined in a subsequent order. D.I. 457 (Aug. 11, 2016). After briefing, the Court issued its Order Re Reasonable Attorneys' Fees. D.I. 489 (July 14, 2017). The Court awarded Gilead $1,365,470 for Deloitte's work and $12,591,636.53 for the work done by Fish & Richardson through June 30, 2016. *Id.* at 17. The Court also awarded Gilead fees for work done by Fish incurred after June 30, 2016, less a reduction of 9.35%, in an amount to be agreed upon by the parties. D.I. 489 at 17. The parties have met and conferred and agree that Gilead is entitled to $341,475 in attorney fees incurred after June 30, 2016 for work done by Fish, consistent with the Court's Order. See *id.*

3. Accordingly, the parties stipulate and agree that the Court should order that the total amount of attorney fees to which Gilead is entitled is $14,298,581.53.

STAYING ENFORCEMENT OF AWARDS OF COSTS AND FEES WITHOUT BOND

4. The due date for a notice of appeal with respect to the Court's order quantifying the amount of fees, D.I. 489, is August 14, 2017. Merck anticipates filing a notice of appeal by that date with respect to (1) the order quantifying fees, (2) the Court's underlying order granting

fees, D.I. 457, and (3) the Court's order taxing costs, D.I. 490. Merck previously appealed from the Court's judgment and its underlying Order Regarding Non-Jury Legal Issues. See D.I. 463 (Aug. 23, 2016).

5. The parties have conferred, and in light of Merck's anticipated appeals of the orders on costs and fees, as well as its pending appeals of the underlying judgment, in order to preserve the status quo pending appeal, Gilead has agreed that it will not seek to enforce or execute on the awards of costs and fees until all appeals in this case are resolved and final.

5. The parties thus stipulate and agree that, to preserve the status quo pending appeal, the Court should stay any enforcement or execution of the awards of costs and fees until all appeals in the case are resolved and final, including the timely filing and disposition of any petition for rehearing and any petition for a writ of certiorari, as well as the completion of proceedings on any such petition in the event it is granted.

6. Because Merck has agreed to take responsibility for any awards of costs and fees remaining after all appeals in the case are resolved and final and further because there is no question as to Merck's ability to pay the awards of costs and fees, the parties further stipulate and agree that the posting of a supersedeas bond is not necessary to secure Gilead's rights pending appeal and that the expense required to post the bond would be wasteful under the circumstances.

7. Accordingly, the parties stipulate and agree that the Court should exercise its discretion and find that no bond is necessary to secure the judgment, and order that any execution or enforcement of the awards of costs and fees

be stayed without Merck having posted a supersedeas bond.[1]

Dated: August 1, 2017

FISH & RICHARDSON P.C.
By: */s/ Elizabeth Flanagan*
Elizabeth Flanagan
Attorney for Plaintiff and Counterclaim Defendant
GILEAD SCIENCES, INC.

Dated: August 1, 2017

WILLIAMS & CONNOLLY LLP
By: */s/ Stanley E. Fisher*
Stanley E. Fisher
Attorney for Defendant
MERCK & CO., INC. and Defendants and Counterclaimants
MERCK SHARP & DOHME CORP. and ISIS PHARMACEUTICALS, INC.

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[1] A district court has "broad discretionary power to waive the bond requirement if it sees fit." *Townsend* v. *Holman Consulting Corp.*, 881 F.2d 788, 796-97 (9th Cir. 1989), such as where the "ability to pay the judgment is so plain that the cost of the bond would be a waste of money.'" *Cotton ex rel. McClure* v. *City of Eureka*, 860 F. Supp. 2d 999, 1028 (N.D. Cal. 2012) (quoting *Olympia Equip. Leasing Co.* v. *W. Union Tel. Co.*, 786 F.2d 794, 796 (7th Cir. 1986)); see also *Fed. Prescription Serv., Inc.* v. *Am. Pharm. Ass'n*, 636 F.2d 755, 760 (D.C. Cir. 1980) (noting that, although Rule 62(d) provides for a stay as of right upon the filing of a supersedeas bond, "the Rule does not limit the district court's power to issue unsecured stays through an exercise of its sound discretion").

SIGNATURE ATTESTATION

Pursuant to Civil Local Rule 5.1(i)(3), I attest under penalty of perjury that concurrence in the filing of this document has been obtained from its signatory.

/s/ Stanley E. Fisher
Stanley E. Fisher

PURSUANT TO STIPULATION, IT IS SO ORDERED.

Dated: August 2, 2017

/s/ Beth Labson Freeman
Honorable Beth Labson Freeman

APPENDIX I

RELEVANT CONSTITUTIONAL AND STATUTORY PROVISIONS

1. Amendment VII of the United States Constitution provides:

In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise reexamined in any Court of the United States, than according to the rules of the common law.

2. 35 U.S.C. § 282 provides in relevant part:

(b) DEFENSES.—The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:

(1) Noninfringement, absence of liability for infringement or unenforceability.

(2) Invalidity of the patent or any claim in suit on any ground specified in part II as a condition for patentability.

(3) Invalidity of the patent or any claim in suit for failure to comply with—

(A) any requirement of section 112, except that the failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable; or

(B) any requirement of section 251.

(4) Any other fact or act made a defense by this title.