# United States Court of Appeals for the Federal Circuit

# DRONE TECHNOLOGIES, INC.,

Plaintiff-Appellee

v.

# PARROT S.A., PARROT, INC.,

Defendants-Appellants

2015-1892, 2015-1955

Appeals from the United States District Court for the Western District of Pennsylvania in No. 2:14-cv-00111-AJS, Judge Arthur J. Schwab.

Decided: September 29, 2016

GENE A. TABACHNICK, Beck & Thomas, P.C., Pittsburgh, PA, argued for plaintiff-appellee. Also represented by RICHARD T. TING.

JEFFREY A. LAMKEN, MoloLamken LLP, Washington, DC, argued for defendants-appellants. Also represented by SARAH JUSTINE NEWMAN, ERIC RICHARD NITZ; JAMES E. HOPENFELD, Singer Bea LLP, San Francisco, CA; TAMMY J. TERRY, Osha Liang LLP, Houston, TX; JOHN M. WHEALAN, Chevy Chase, MD.

Before NEWMAN, SCHALL, and CHEN, Circuit Judges.

Opinion for the court filed by Circuit Judge SCHALL.

Opinion concurring in the judgment filed by Circuit Judge NEWMAN.

SCHALL, Circuit Judge.

Parrot, S.A. and Parrot, Inc. (collectively, "Parrot") appeal from the final judgment of the United States District Court for the Western District of Pennsylvania that awarded Drone Technologies, Inc. ("Drone") damages for Parrot's infringement of two patents owned by Drone as assignee and that also awarded Drone attorney fees pursuant to 35 U.S.C. § 285 and Rule 37 of the Federal Rules of Civil Procedure. Drone Techs., Inc. v. Parrot S.A., No. 14CV0111, 2015 WL 3756318, at \*1, \*14 (W.D. Pa. June 12, 2015). The awards of damages and attorney fees came after the district court entered a default judgment against Parrot as a sanction for Parrot's failure to comply with two discovery orders issued by the court. The default judgment struck Parrot's answer and counterclaims and made Parrot liable for infringement of the two patents. Drone Techs., Inc. v. Parrot S.A., 303 F.R.D. 254, 266 (W.D. Pa. 2014). For the reasons set forth below, we hold that the district court abused its discretion in issuing the two discovery orders and in entering a default judgment against Parrot for its failure to comply with the orders. We therefore vacate the final judgment and the awards of damages and attorney fees and remand the case to the district court for further proceedings consistent with this opinion.

Parrot also appeals the district court's denial of its motion to dismiss Drone's complaint for lack of standing. As discussed below, the basis for the motion was Parrot's contention that the assignments to Drone were invalid because the person named on the patents and who assigned the patents to Drone was not the true inventor.

Parrot also raised the affirmative defense of improper inventorship under 35 U.S.C. § 102(f), which the district court struck as part of its default judgment. We affirm the district court's denial of Parrot's motion to dismiss for lack of standing. However, on remand, Parrot will have the opportunity to reassert its invalidity defense based on alleged incorrect inventorship. The district court will be in a position to resolve the issue of inventorship; a successful challenge to inventorship may invalidate the patents-in-suit.

## BACKGROUND

I.

Drone is a Taiwanese corporation and the assignee of U.S. Patent Nos. 7,584,071 ("the '071 patent") and 8,106,748 ("the '748 patent") (collectively, "the patents-insuit"). The patents-in-suit are generally directed to systems for remotely controlled machines. '071 patent. Abstract; '748 patent, Abstract.<sup>1</sup> According to the '071 patent, at the time of the invention, conventional remotecontrol systems included two main components: a remotecontrolled device (e.g., a model airplane) and a handheld device with a control stick. Id. at 1:22–36. To control the movement of the airplane once in flight, a user would alter the position of the stick to cause an associated change in the flight angle of the plane. See id. at 1:36–47. Such systems had drawbacks, though, as they only controlled movement in two directions. See id. at 1:48-51. Other systems existed that enabled users to control three directions of movement. The handheld devices in those systems, however, incorporated multiple control elements, which required simultaneous use of both hands and thus

<sup>&</sup>lt;sup>1</sup> The patents-in-suit share similar specifications; thus, reference to the '071 patent suffices for the purpose of providing background.

made controlling the airplane's flight path difficult. See id. at 1:52–60. The patents-in-suit purport to overcome these deficiencies by providing a system that enables a user to synchronize the movement of a remote-controlled device with the movement of a remote controller. See id. at 1:64–2:2, 2:62–3:3. In other words, moving the handheld control itself causes a synchronous movement of the airplane. For example, if the handheld control is tilted downward and to the left, the plane moves down and to the left.

The claims of the patents-in-suit recite systems with "a remote controller" and "a remote-controlled device," each having a set of "modules." *Id.* at 7:63–8:24. Independent claim 1 of the '071 patent is representative of the claimed subject matter and provides as follows:

## 1. A remote control system, comprising:

a remote controller, comprising:

a motion detecting module, which detects the remote controller's motion and outputs a motion detecting signal; and a first communication module, which connects to the motion detecting module and receives the motion detecting signal, and transmits a target motion signal according to the motion detecting signal; and

a remote-controlled device, which is controlled by the remote controller, comprising:

- a second communication module, which receives the target motion signal from the remote controller:
- a terrestrial magnetism sensing module, which detects the remote-controlled device's terrestrial magnetism and outputs a terrestrial magnetism sensing signal;

a processing module, which has a first input connected to the terrestrial magnetism sensing module and receives the terrestrial magnetism sensing signal, and a second input connected to the second communication module and receives the target motion signal, and processes the terrestrial magnetism sensing signal and the target motion signal to output a driving control signal; and

a driving module, which connects to the processing module and receives the driving control signal, and adjusts the remote-controlled device's motion according to the driving control signal.

'071 patent, 7:63-8:24 (emphases added).

Parrot, S.A. is based in Paris, France. Its wholly owned subsidiary, Parrot, Inc., is a New York corporation headquartered in Michigan. Parrot is a designer, developer, and marketer of hobby aircraft, i.e., "drones." When this lawsuit was initiated, Parrot offered the AR.Drone and the AR.Drone 2.0 in the United States. Parrot also had two other types of drones: the Bebop Drone, which was still under development, and its Jumping Sumo and Rolling Spider MiniDrones (the "MiniDrones"), which had not yet been released in the United States. Parrot also offered software—the "FreeFlight" application—that consumers could download and install on a touchscreen device (e.g., a smartphone) to pilot a Parrot drone. Pertinent to this case, Parrot's drones require source code for their operation.<sup>2</sup> Parrot uses source code for the Free-Flight application (the "off-board source code") and sepa-

<sup>&</sup>lt;sup>2</sup> Source code is the text of a program written in a human-readable programming language. *Microsoft Computer Dictionary* 491 (5th ed. 2002). Once written, source code needs to be compiled into machine code before it can be executed by a computer. *Id.* at 372, 491.

rate source code in the drone itself (the "on-board source code").

II.

On January 24, 2014, Drone sued Parrot in the Western District of Pennsylvania, alleging that Parrot (by virtue of its customers' actions) indirectly infringed the '071 patent and the '748 patent. In particular, Drone contended that Parrot instructed customers who purchased the AR.Drone or AR.Drone 2.0 to download and use the FreeFlight application to pilot their aircraft.<sup>3</sup> Once the customers followed Parrot's instructions and implemented Parrot's remote-controlled system, Drone alleged, they directly infringed the systems claimed in the patents-in-suit.

Parrot answered the complaint on May 7, 2014, denying infringement and asserting various counterclaims and affirmative defenses, based on its view that the patentsin-suit were neither infringed nor valid. As more fully discussed below, after discovery was underway, the parties began to dispute whether Parrot should be required to produce all source code used in operating its drones. Eventually, Drone filed a motion to compel. In an order dated July 1, 2014, the district court granted Drone's motion, compelling Parrot to produce, inter alia, its onboard source code. Unsatisfied with Parrot's subsequent productions, Drone filed another motion to compel Parrot to produce its on-board source code, which the court granted on July 25, 2014. Subsequently, on November 3, 2014, the district court sanctioned Parrot for its failure to comply with its two prior discovery orders. In imposing sanctions, the court struck Parrot's counterclaims and

<sup>&</sup>lt;sup>3</sup> Drone did not identify the Bebop Drone or Mini-Drones in its complaint.

defenses and entered a default judgment against it as to liability.

## III.

Having found Parrot liable for infringement, the court scheduled proceedings on damages. In due course, the issue of damages was tried before a jury, with the jury finding that Drone was entitled to \$7.8 million in damages for Parrot's infringement. Thereafter, the court entered judgment in favor of Drone in the amount of \$7.8 million and awarded Drone roughly \$1.7 million in attorney fees pursuant to 35 U.S.C. § 285 and Fed. R. Civ. P. 37. Parrot now appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## DISCUSSION

Parrot raises three issues on appeal. First, it contends that Drone did not have standing to sue and that, therefore, the district court should have dismissed Drone's suit for lack of jurisdiction. Second, Parrot argues that the court abused its discretion in directing Parrot to turn over its on-board source code and then sanctioning Parrot by entering a default judgment against it when it failed to do so. Finally, Parrot urges that, even if the default judgment of liability is allowed to stand, the award of damages should be vacated because the district court misapplied the law on damages and abused its discretion in allowing the jury to consider certain evidence on damages. We turn first to the matter of standing.

I.

A.

Following the district court's entry of default judgment, but before the trial on damages, Parrot moved on February 5, 2015, for dismissal of Drone's complaint for lack of standing. Parrot argued that the district court

lacked jurisdiction because Drone did not have complete ownership of the '071 and '748 patents and thus did not have standing to bring an action for infringement. While recognizing that Drone is the putative assignee of the patents-in-suit, Parrot contended that the assignment to Drone is null and void because Yu-Tuan Lee ("Ms. Lee"), who is named as the sole inventor on the face of the patents and who executed the assignment, did not actually invent the claimed subject matter. According to Parrot, Bruce Ding ("Mr. Ding"), Ms. Lee's husband, is the true inventor or, at the very least, is a co-inventor. Parrot appended to its motion transcripts of portions of Ms. Lee's and Mr. Ding's depositions. Parrot urged that the transcripts demonstrated that Ms. Lee does not qualify as an inventor and that they showed that Mr. Ding, who did not execute the assignment to Drone, does qualify as an inventor.

In a memorandum order filed on March 24, 2015, the district court denied Parrot's motion. *Drone Techs., Inc. v. Parrot S.A.*, No. 14CV0111, 2015 WL 1326334, at \*3 (W.D. Pa. Mar. 24, 2015). Despite viewing Parrot's arguments as "re-styled versions" of invalidity defenses stricken as part of the default judgment, the court addressed Parrot's challenge to inventorship. *Id.* at \*2.4 Although

<sup>&</sup>lt;sup>4</sup> Before the default judgment, on October 22, 2014, Parrot moved for leave to amend its answer to "add a defense and counterclaim for unenforceability due to inequitable conduct, and to add more specificity to the already pled defense and counterclaim for invalidity . . . under 35 U.S.C. § 102(f)." On November 3, 2014, the same day it sanctioned Parrot, the district court denied as moot Parrot's motion to amend. J.A. 42. On February 18, 2015, Parrot moved for leave to assert against Drone's damages claim an affirmative defense and a request for equitable relief based on the contention that Ms. Lee was

the court did not cite any particular evidence or caselaw, it nevertheless found that the record sufficiently supported Ms. Lee's claim to be a properly named inventor and that it did not demonstrate that Mr. Ding is at least a coinventor. *Id.* at \*2. In light of Parrot's concession that Ms. Lee is presumed to be the sole inventor, the court concluded that Drone had standing to sue as the rightful owner of the patents-in-suit by virtue of the assignment from her. *See id.* at \*2–3.

В.

Parrot argues that we must consider inventorship to satisfy ourselves that Drone has standing and that the district court thus had jurisdiction. According to Parrot, the record establishes that Ms. Lee is not an inventor or at most is only a co-inventor, along with Mr. Ding. particular, Parrot contends that Ms. Lee did not conceive of the claimed invention because she had "just a simple idea" to control aircraft using the movements of a remote controller, and did not have a solution for accomplishing that idea or even understand any of the technology described in the patents-in-suit. It was Mr. Ding, Parrot asserts, who conceived of the invention's structure and the operative method of making the technology. In fact, in Parrot's view, Mr. Ding accounted for all aspects of the invention except the "idea" of having the aircraft's movements mimic the controller's. Because Mr. Ding was the inventor or at least a co-inventor, Parrot reasons, Drone

incorrectly named as the sole inventor on the '071 and '748 patents. The district court denied the motion on March 2, 2015. J.A. 43–46. In its order, the court stated that Parrot's motion, "filed over three months after liability has been established," was "the product of undue delay and would impede the resolution of remaining damages issues." J.A. 44–45.

did not acquire complete (or any) ownership from Ms. Lee and, thus, did not have standing to sue.

Drone contends that an analysis of inventorship is unnecessary, given Parrot's acknowledgment that Ms. Lee is named as the sole inventor and that she assigned to Drone the patents-in-suit. Drone reasons that, because Ms. Lee had standing as the patentee to whom the patents-in-suit issued, it obtained standing as her successor in title. In Drone's view, the district court therefore did not need to consider inventorship as a prerequisite to standing because inventorship and standing are separate legal issues. And even if the court was required to address inventorship, Drone urges, Parrot failed to provide clear and convincing evidence that Mr. Ding is a coinventor. It thereby failed to overcome the presumption that Ms. Lee is the only inventor.

C.

We review de novo a district court's determination of standing. Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., 776 F.3d 837, 842 (Fed. Cir. 2015); Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1551 (Fed. Cir. 1995) (en banc). Standing is a jurisdictional issue that implicates the case-or-controversy requirement of Article III. Lujan v. Defs. of Wildlife, 504 U.S. 555, 560 (1992); Samsung Elecs. Co. v. Rambus, Inc., 523 F.3d 1374, 1378 (Fed. Cir. 2008) ("Standing to sue or defend is an aspect of the caseor-controversy requirement."). To establish standing under Article III, a plaintiff must demonstrate, inter alia, that it has suffered an "injury in fact." Lujan, 504 U.S. at 560. "Constitutional injury in fact" occurs when a party infringes a patent in violation of a party's exclusionary rights. Morrow v. Microsoft Corp., 499 F.3d 1332, 1339– 40 (Fed. Cir. 2007).

Before a court may exercise jurisdiction over a patent infringement action, it must be satisfied that, "in addition to Article III standing, the plaintiff also possesse[s] stand-

ing as defined by § 281 of the Patent Act." Alps S., LLC v. Ohio Willow Wood Co., 787 F.3d 1379, 1382 (Fed. Cir. 2015). Under § 281, "[a] patentee shall have remedy by civil action for infringement of his patent." 35 U.S.C. § 281 (2012) (emphasis added). A "patentee" is not limited to the person to whom the patent issued, but also includes "successors in title to the patentee." 35 U.S.C. § 100(d) (2012) (emphasis added); see also H.R. Techs., Inc. v. Astechnologies, Inc., 275 F.3d 1378, 1384 (Fed. Cir. 2002) ("In order to have standing, the plaintiff in an action for patent infringement must be a 'patentee' pursuant to 35 U.S.C. §§ 100(d) and 281 . . . . "). A party may become the successor in title to the original patentee by assignment, 35 U.S.C. § 261 at ¶ 2 ("[P]atents, or any interest therein, shall be assignable in law by an instrument in writing."), and then may sue for infringement in its own name, Propat Int'l Corp. v. RPost, Inc., 473 F.3d 1187, 1189 (Fed. Cir. 2007); Morrow, 499 F.3d at 1339–40 (explaining that a plaintiff that "hold[s] all legal rights to the patent as the patentee or assignee of all patent rights . . . is one entitled to sue for infringement in its own name").

When multiple inventors are listed on the face of a patent, "each co-owner presumptively owns a pro rata undivided interest in the entire patent, no matter what their respective contributions." *Isr. Bio-Eng'g Project v. Amgen, Inc.*, 475 F.3d 1256, 1263 (Fed. Cir. 2007) (internal quotation marks and citation omitted). Consequently, if a co-inventor assigns his or her ownership interest to a third party, the assignee cannot sue infringers "[a]bsent the voluntary joinder of all co-owners." *Id.* at 1264–65.

The parties do not dispute that Ms. Lee is the only person named on the face of the patents-in-suit, or that Ms. Lee assigned to Drone her ownership interests in the patents-in-suit. Instead, as noted, the parties dispute whether, in assessing standing, we (1) should presume that Ms. Lee is correctly named as the sole inventor or

(2) should independently assure ourselves that, in fact, she is the sole inventor. Drone argues for the first approach, Parrot the second. We agree with Drone that, in this case, the first approach is the correct one.

There is a "presumption that [a patent's] named inventors are the true and only inventors." Acromed Corp. v. Sofamor Danek Grp., Inc., 253 F.3d 1371, 1379 (Fed. Cir. 2001) (citing Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997)). In our view, Parrot has failed to advance a persuasive reason for not accepting this presumption at this stage of the litigation, particularly when another avenue exists for it to challenge inventorship. Specifically, a party may raise the defense that a patent is invalid for failing to name the correct inventors. 35 U.S.C. § 102(f) (2006)<sup>5</sup>; *Pannu v.* Iolab Corp., 155 F.3d 1344, 1348–50 (Fed. Cir. 1998). Parrot recognized as much when it first attempted to add a claim and defense under § 102(f) to its answer, alleging both the misjoinder of Ms. Lee and the nonjoinder of Mr. Ding. J.A. 2437–38. However, the court denied as moot<sup>6</sup> Parrot's motion to amend its answer at the same time the court imposed sanctions. While "[i]t is well settled that questions of standing can be raised at any time," Bd. of Trustees of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 583 F.3d 832, 841 (Fed. Cir. 2009), aff'd, 563 U.S. 776 (2011) (hereinafter "Roche"), we see no reason why Parrot should be allowed to reassert an invalidity challenge under the guise of a motion to dismiss for lack of standing.

<sup>&</sup>lt;sup>5</sup> 35 U.S.C. § 102(f) provides that a person shall be entitled to a patent unless "he did not himself invent the subject matter sought to be patented."

<sup>&</sup>lt;sup>6</sup> A decision the district court may reconsider on remand.

Parrot does not cite any controlling authority suggesting that we must undertake the review it seeks; namely, a substantive examination of *inventorship* in order to resolve an issue of standing in an infringement action where the plaintiff's claim to title is not otherwise in dispute. Parrot's reliance on Pandrol USA, LP v. Airboss Railway Products, Inc., 320 F.3d 1354 (Fed. Cir. 2003), in support of its position is misplaced. In *Pandrol*, we found that "the defendants waived the right to contest the plaintiffs' title to the patent, insofar as lack of ownership is viewed as a defense to the claim of infringement." Id. at 1367. We explained, however, that "the defendants' waiver of the defense of lack of patent ownership did not waive the defendants' ability to challenge the plaintiffs' standing to sue." Id. Significantly, in "examin[ing] the record to determine if it support[ed] the plaintiffs' Article III standing," we only analyzed the relevant assignment records (i.e., the ownership information); we did not evaluate inventorship as it may relate to ownership and standing. See id. at 1367–68. It does not follow from our examination of patent ownership in *Pandrol* that we here must consider whether Ms. Lee is correctly named as the sole inventor for purposes of determining standing. Indeed, while ownership and inventorship are related concepts, they involve separate inquiries. Isr. Bio-Eng'g, 475 F.3d at 1263 (explaining that "issues of patent ownership are distinct from questions of inventorship"); Beech Aircraft Corp. v. EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993) ("It is elementary that inventorship and ownership are separate issues.").

Neither does *Roche* support Parrot's position. In that case, we held that although the defendant was timebarred from obtaining a judgment of patent ownership, it still could assert the plaintiff's lack of patent ownership "as a defense and a challenge to [the plaintiff's] standing to maintain its action against [the defendant]." *Roche*, 583 F.3d at 839. In *Roche*, we considered the plaintiff's

ownership of the patent at issue to satisfy ourselves on the question of standing. *Id.* at 839, 848. As in *Pandrol*, though, we only examined ownership when addressing standing, and, in considering ownership, we accepted that the named inventors were the true inventors. *See id.* at 837, 844, 848.

Parrot suggests that Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456 (Fed. Cir. 1998), requires us to assess inventorship when considering Drone's standing. We do not agree. In *Ethicon*, the defendant obtained a license from a putative co-inventor and then moved the trial court, under 35 U.S.C. § 256, to add the co-inventor as a named inventor on the patent asserted against the defendant. Id. at 1459. After the court granted the motion to correct inventorship, the defendant successfully moved to dismiss the case for failure to join a co-inventor. Id. at 1459-60. We affirmed. Id. at 1468. The key difference between Ethicon and this case is that the district court in Ethicon had already established that the patentin-suit had a co-inventor who was not named as a plaintiff when the defendant moved to dismiss. Unlike in *Ethicon*, here, the district court never granted (or even considered) a § 256 motion, so the court was not presented with a newly established inventorship when Parrot moved to dismiss based on Drone's alleged lack of standing. Thus, even though *Ethicon* involved an issue of inventorship ultimately leading to a dismissal, it does not compel consideration of inventorship in determining standing in this case.

Since we need not address the merits of Parrot's inventorship challenge, the standing analysis in this case is straightforward. Parrot concedes, as it must, that Ms. Lee is the presumed "true and only" inventor. Moreover, beyond its challenge to inventorship, Parrot does not contend that Drone's assignment is null or void under a contractual theory or any other ownership theory. In short, Drone established standing under § 281 by virtue of

its status as the sole patentee (i.e., successor in title), and also satisfied Article III's standing requirement by owning a patent that allegedly has been infringed, *Pandrol*, 320 F.3d at 1368 ("Establishing ownership of a patent that has been infringed satisfies the requirements of Article III standing."). We therefore affirm the district court's denial of Parrot's motion to dismiss for lack of standing without reviewing or endorsing the district court's inventorship analysis. The district court had, and will continue to have, jurisdiction to hear Drone's suit.<sup>7</sup>

II.

A.

Parrot's main argument on appeal is that the district court twice abused its discretion: first, when it directed Parrot to turn over its on-board source code; and, second, when it sanctioned Parrot by entering a default judgment against it after it failed to produce the source code.

Discovery in patent cases in the Western District of Pennsylvania is governed by the Federal Rules of Civil Procedure and the district's local patent rules. *See W.D. Pa. LPR* (effective Dec. 1, 2009). Pertinent to the issue before us is Local Patent Rule 3.1 ("LPR 3.1"). While this case was pending in the district court, LPR 3.1 provided in relevant part as follows:

With the Initial Disclosures of the party opposing a claim of patent infringement, such party

As noted above, Parrot will have the opportunity to reassert its defense based on alleged incorrect inventorship. Should Parrot choose to challenge inventorship under 35 U.S.C. § 102(f), the district court will be in a position to consider Parrot's arguments relating to inventorship that we do not address here, giving due consideration to our precedents on inventorship.

shall produce *or make available for inspection and copying*, among other items:

Source code, specifications, schematics, flow charts, artwork, formulas, drawings or other documentation . . . sufficient to show the operation of any aspects or elements of each accused apparatus, product, device, process, method or other instrumentality identified in the claims pled of the party asserting patent infringement . . . .

## W.D. Pa. LPR 3.1 (emphases added).8

Discovery began on June 11, 2014, when Parrot served on Drone its "Initial Disclosures," which included over two-thousand pages of documents. The parties immediately began to dispute whether Parrot's production met the requirements of LPR 3.1, with Drone insisting that Parrot was required to produce "source code, specifications, schematics, [and] flow charts" relating to the accused products and Parrot contending that its production was "sufficient to show the operation of the accused products as required by LPR 3.1." J.A. 609–14. After a series of email exchanges and a fruitless meet and confer, Drone moved the district court to compel Parrot to produce the requested information (the "Initial Motion"). In the Initial Motion, Drone reiterated its belief that, under LPR 3.1, Parrot was required to produce source code, specifications, schematics, and flow charts. J.A. 578–83. Noting that Parrot's products use off-board and on-board source code. Drone asserted that the former was critically important to its case because that code permits users to

<sup>&</sup>lt;sup>8</sup> After Parrot filed its appeal, the Western District amended its local patent rules. The amended rules became effective December 5, 2015.

pilot the accused products. J.A. 581–82. For its part, Parrot did not dispute that it had not produced any source code. It instead argued that LPR 3.1 did not include a requirement to produce source code, or any other particular kind of document. J.A. 604–05. According to Parrot, Drone did not even dispute that Parrot had complied with LPR 3.1 by producing documents "sufficient to show" the operation of the accused products. J.A. 601. Parrot also contended that Drone had failed to establish that any of Parrot's source code was necessary to show the operation of the accused products or to prove infringement of any claim. J.A. 602–04.

The district court sided with Drone, issuing a onepage order on July 1, 2014 (the "July 1 Order"). In the July 1 Order, the court compelled Parrot to "produce all source code, specifications, schematics, charts...relating to the operation of the accused products (Parrot's AR.Drone, AR.Drone 2.0, MiniDrone[s], and Bebop Drone) . . . on or before July 9, 2014." J.A. 5. The court provided no analysis or reasoning in the July 1 Order. See J.A. 5. Two days later, Parrot filed an emergency motion for clarification and reconsideration of the July 1 Order. In it, Parrot made three requests. J.A. 698. First, Parrot asked the court to allow it to make available for inspection its on-board source code, which it said is "extremely sensitive technical information." J.A. 703–04. Second, it requested that it be able to produce documents on a rolling basis beginning on July 9. J.A. 704-06. And third, it sought permission to not produce documents relating to the Bebop Drone and MiniDrones because, in its view, those products were not accused of infringement. J.A. 706-07. On July 8, 2014, the court denied Parrot's emergency motion in a text order (i.e., a text-only entry on the court's docket that does not include a written analysis).

Shortly thereafter, Parrot produced various documents, as required by the July 1 Order. These documents

included its off-board source code. J.A. 892. However, because Parrot did not produce, among other things, documents relating to the Bebop Drone, the MiniDrones, and the on-board source code. Drone moved the district court to order Parrot to comply with the July 1 Order (the "Second Motion"). In opposing the See J.A. 879–89. Second Motion, Parrot argued that it had produced, or would imminently produce, the documents necessary to comply with the July 1 Order. See J.A. 893–900. As for the on-board source code and the Bebop Drone and Mini-Drones documents, Parrot suggested that it should be allowed to make the former available for inspection and insisted that the latter were irrelevant to the lawsuit. J.A. 895-97. The court granted Drone's Second Motion in an order dated July 25, 2014 (the "July 25 Order"), and gave Parrot until August 13, 2014, to comply. J.A. 8-9. The district court also ordered Parrot to file a "written confirmation" of its compliance. J.A. 9. In addition, the court prompted Drone to file a "Motion to Show Cause why [Parrot] should not be held in contempt" if Parrot again failed to comply. J.A. 9.

One week later, Parrot moved the district court to modify the existing protective order to include certain safeguards for the production of the on-board source code. See J.A. 914–24. Believing that the protective order in place adequately guarded Parrot's interests, the court denied the motion. J.A. 10–11. On August 13, 2014, the last day to comply, Parrot filed an emergency motion to seek relief from the July 25 Order. It urged the court to excuse it from producing its on-board source code and from producing documents relating to the Bebop drone, and it sought an extension of time to produce documents relating to the MiniDrones. J.A. 1279–80. Parrot also requested, in the alternative, a stay of the litigation in order to allow it to file with this court (and to allow this court to resolve) an application for a writ of mandamus.

J.A. 15, 1279. The district court denied Parrot's motion the following day. J.A. 16.

On August 18, 2014, Drone filed a motion to show cause why Parrot should not be held in contempt. J.A. 1328. Thereafter, on October 23, 2014, the district court held a hearing on the motion. J.A. 27. By this time, although Parrot had produced over 14 million pages of documents, it had not given Drone the on-board source code or filed its "written confirmation." J.A. 27, 31, 3273-74. At the hearing, the court heard testimony from Parrot's "head of legal" and from a "project manager" at Parrot, as well as arguments from counsel for both parties. J.A. 20, 27. At the conclusion of the hearing, the district court ordered the parties to file briefing on the appropriateness of sanctions. J.A. 27–28. On November 3, 2014, the court issued an opinion on Drone's motion to show cause. Drone Techs., Inc. v. Parrot S.A., 303 F.R.D. 254 (W.D. Pa. 2014). In assessing the propriety of sanctions, the court balanced the six "Poulis" factors. Poulis v. State Farm Fire & Cas. Co., 747 F.2d 863, 867 (3d Cir. 1984) (enumerating factors for courts to consider in sanctioning parties). Considering the *Poulis* factors, the court found that they weighed in favor of imposing a default sanction instead of holding Parrot in contempt. 303 F.R.D at 265–66. Concluding that "lesser sanctions" would have been inadequate, the court entered a default judgment against Parrot as to liability and struck its answer and counterclaims. Id. at 266; J.A. 42.

In the meantime, on September 24, 2014, Parrot had filed with us two petitions for writ of mandamus. *In re Parrot S.A.*, Nos. 14-156, 14-157 (Fed. Cir. 2014). In its petitions, Parrot contended that the writs should issue because the district court (1) had exceeded its authority by compelling Parrot to produce its on-board source code and information relating to the Bebop Drone and Mini-Drones and (2) had abused its discretion by refusing to grant a motion to transfer venue filed by Parrot. We

denied the petitions on January 22, 2015. *In re Parrot S.A.*, No. 14-156, Order at 2 (Fed. Cir. Jan. 22, 2015) (per curiam) (Doc. No. 34). Relevant here, we stated that "the appeal from the default judgment" entered as a sanction "provides an adequate means to challenge the discovery order relating to the source code." *Id.* 

В.

As noted, Parrot contends that the district court (1) abused its discretion when it issued the July 1 and July 25 Orders and (2) abused its discretion again when it entered a default judgment against Parrot for its failure to comply with the orders.<sup>9</sup> On the first point, Parrot argues that the court misconstrued Parrot's initialdisclosure obligations because LPR 3.1 does not require defendants to produce all source code, or even any source code, and does not require production. Parrot further argues that LPR 3.1 only requires materials sufficient to show how each accused product operates. Further, Parrot asserts that the court's July 1 and July 25 Orders defied traditional principles of discovery by requiring Parrot to produce irrelevant materials without considering the burden placed on it. Regarding the second point, Parrot concedes it did not produce its on-board source code, but avers that Drone's unsubstantiated prejudice and the availability of alternative remedies demonstrate that the default sanction was improper.

Drone does not present substantive arguments in defense of the July 1 and July 25 Orders. On the matter of the default sanction, Drone relies on the district court's decision. It contends that default was the right sanction because the record supports the district court's findings

 $<sup>^{9}\,\,</sup>$  On appeal, Parrot does not raise the issue of venue.

on the *Poulis* factors and because the court properly balanced those factors when considering sanctions.

C.

We are guided by regional circuit law when reviewing discovery rulings, *Dorf & Stanton Commc'ns, Inc. v. Molson Breweries*, 100 F.3d 919, 922 (Fed. Cir. 1996), and the imposition of sanctions, *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1370 (Fed. Cir. 2002). In the Third Circuit, "[i]t is well established that the scope and conduct of discovery are within the sound discretion of the trial court." *Marroquin-Manriquez v. I.N.S.*, 699 F.2d 129, 134 (3d Cir. 1983). Accordingly, a ruling on a discovery issue is only disturbed on appeal when it is found to be an abuse of discretion. *Petrucelli v. Bohringer & Ratzinger*, 46 F.3d 1298, 1310 (3d Cir. 1995).

The imposition of sanctions is likewise reviewed for an abuse of discretion. Grider v. Keystone Health Plan Cent., Inc., 580 F.3d 119, 134 (3d Cir. 2009). A district court abuses its discretion in imposing sanctions when it bases its ruling (1) "on an erroneous view of the law" or (2) "on a clearly erroneous assessment of the evidence." Bowers v. Nat'l Collegiate Athletic Ass'n, 475 F.3d 524, 538 (3d Cir. 2007) (quoting Cooter & Gell v. Hartmarx Corp., 496 U.S. 384, 405 (1990)). When reviewing a default or dismissal sanction, "[i]t is the function of the appellate court to determine if the court properly balanced the *Poulis* factors and whether the record supports its findings." Livera v. First Nat'l State Bank of N.J., 879 F.2d 1186, 1194 (3d Cir. 1989); Ali v. Sims, 788 F.2d 954, 957 (3d Cir. 1986).

We conclude that, in this case, the district court twice abused its discretion: first, when it issued the July 1 and July 25 Orders; and second, when it imposed a default sanction on Parrot for not complying with those orders. We turn first to the discovery orders.

1.

District courts must generally follow their own local rules. See Blue v. U.S. Dep't of Army, 914 F.2d 525, 550 (4th Cir. 1990) (vacating attorney-disciplinary sanctions because "the district court failed to follow its own local rules"); Ortega v. Geelhaar, 914 F.2d 495, 497–98 (4th Cir. 1990) (vacating Rule 11 sanctions because "the district court ignored its own local rules"); Manshack v. Sw. Elec. Power Co., 915 F.2d 172, 175 (5th Cir. 1990) (explaining that a district court should "scrupulously adhere" to its own local procedures"); Woods Constr. Co. v. Atlas Chem. Indus., Inc., 337 F.2d 888, 890 (10th Cir. 1964) ("Rules of practice adopted by the United States District Courts . . . have the force and effect of law, and are binding upon the parties and the court which promulgated them . . . . ") (citations omitted). In issuing the July 1 and July 25 Orders, the district court failed to follow its local patent rules (as well as the Federal Rules) and also failed to provide any explanation for its deviation from those rules. In our view, the court erred in five respects.

First, the district court granted the Initial Motion even though it did not find (and Drone did not show) that Parrot had failed to meet its obligations under LPR 3.1. Indeed, in the Initial Motion, Drone did not even attempt to address whether the documents Parrot produced in its Initial Disclosures were "sufficient to show" the operation of the accused products, which is all that LPR 3.1 re-As noted, Parrot produced over two-thousand pages of documents that, in its view, sufficiently demonstrated how its accused products operate. Drone never explained why Parrot's production was lacking; nevertheless, it insisted that Parrot was required to produce all of its source code. Drone was wrong. Although LPR 3.1 describes various types of documentation that may be disclosed, it requires no particular kind of document. LPR 3.1 plainly envisions that a defendant may produce "other documentation" instead of source code. The record

is devoid of any showing that Parrot's initial production did not meet the requirements of LPR 3.1. In addition, the July 1 Order does not provide any explanation for the decision to grant the Initial Motion and does not address any perceived flaws in Parrot's initial production. Without any explanation from Drone as to any deficiencies in Parrot's initial production, the court could not have determined that Parrot had not met its burden under the local rules. Under these circumstances, we think the court should not have granted the Initial Motion. <sup>10</sup>

Second, in the July 1 and July 25 Orders, the district court appears to have overlooked the "sufficient to show" limitation in LPR 3.1 by forcing Parrot to turn over "all" of its technical information "relating to the operation of the accused products." J.A. 5, 9. The court's July 1 Order provides no explanation for its breadth; in fact, Drone did not even request such a broad order. To the contrary, Drone only requested "all of the source code, specifications, schematics and flow charts, as required by LPR 3.1." J.A. 583 (emphasis added). Thus, even if Drone was entitled to *some* source code, the court provided no rationale for forcing Parrot to produce all of its source code and other technical documents as part of its Initial Disclosures.

Third, in the July 1 and July 25 Orders, the district court also appears to have overlooked the "make available for inspection and copying" language in LPR 3.1 by directing Parrot to "produce" all information. J.A. 5, 9. LPR 3.1 clearly allows Parrot to make its source code available for inspection. Drone never argued in its Initial and Second Motions that it needed Parrot to produce the code be-

<sup>&</sup>lt;sup>10</sup> Although we focus on the July 1 Order, our analysis applies with equal force to the July 25 Order, as the later-issued order provides no new reasoning or analysis and merely enforces the earlier order.

cause, for whatever reason, it could not inspect the code; rather, Drone misconstrued LPR 3.1 as requiring production. J.A. 579. Instead of recognizing that Drone had misconstrued the local rule, the court accepted Drone's position and did so without providing any explanation. J.A. 6. Thereafter, when Parrot filed an emergency motion to clarify that LPR 3.1 allows it to make its source code available for inspection, the court simply denied the request for relief, again without providing any reasoning. J.A. 6. The record contains no basis to support the court's conclusion that Parrot had to produce its source code even though LPR 3.1 envisions inspection as an alternative.

Fourth, the district court's July 1 and July 25 Orders failed to take into account the "identified in the claims pled" limitation in LPR 3.1 by forcing Parrot to produce documents relating to the Bebop Drone and MiniDrones. None of these products were identified in Drone's complaint or otherwise accused of infringement. 153–59. Contrary to Drone's assertion, it did not identify these products as infringing in its infringement contentions. Instead, it merely stated that the Bebop Drone and MiniDrones "may also be Accused Instrumentalities; however, there is insufficient information currently available to make [that] determination." J.A. 2097. Notwithstanding that these products were never identified as infringing, the court compelled Parrot to produce all technical information related to their operation, and it did so without providing any explanation. J.A. 5. When Parrot tried to clarify that LPR 3.1 does not call for production relating to non-accused products, the court denied Parrot's request without providing any reasoning. J.A. 6. The record thus contains no basis to support the court's conclusion that Parrot had to produce documents relating to non-accused products, even though LPR 3.1 only requires disclosures relating to accused products.

Finally, the July 1 and July 25 Orders failed to address the absence of any showing of relevance or need for

the on-board source code and documents relating to the Bebop Drone and MiniDrones. 11 Federal Rule of Civil Procedure 26(b)(1) allows a party to obtain discovery "relevant to any party's claim or defense." 12 Fed. R. Civ. P. 26(b)(1); see also Micro Motion, Inc. v. Kane Steel Co., 894 F.2d 1318, 1323 (Fed. Cir. 1990) (explaining that discovery may not be had unless it is relevant to the subject matter of the pending action). However, "felven if relevant, discovery is not permitted where no need is shown." Micro Motion, 894 F.2d at 1323; Am. Standard Inc. v. Pfizer Inc., 828 F.2d 734, 743 (Fed. Cir. 1987) ("Where proof of either relevance or need is not established, discovery is properly denied."). Drone's Initial Motion was virtually silent on the subject of the Bebop Drone and MiniDrones, offering no explanation as to how these non-accused products were relevant or necessary to any of its infringement claims. See J.A. 578–83. The only mention of these products, in fact, appears in the proposed order attached to Drone's Initial Motion. J.A. 597. Notwithstanding that the Bebop Drone and MiniDrones seemed to have slipped into the fold, the court's July 1 and July 25 Orders failed to address the relevance of, or need for discovery relating to, these products. J.A. 5, 9. Because there was neither a charge of infringement nor

<sup>&</sup>quot;A determination of relevance implicates substantive patent law. Therefore, we look to Federal Circuit law rather than regional circuit law in discussing relevance." *Micro Motion, Inc. v. Kane Steel Co.*, 894 F.2d 1318, 1326 n.8 (Fed. Cir. 1990) (citing *Truswal Sys. Corp. v. Hydro-Air Eng'g, Inc.*, 813 F.2d 1207, 1212 (Fed. Cir. 1987)).

<sup>12</sup> The Federal Rules of Civil Procedure, particularly the rules regarding discovery, were amended effective December 1, 2015. Because the old rules governed the proceedings below when the district court issued the July 1 and July 25 Orders, we review the district court's actions based on the rules then in effect.

any evidence of relevance or need, discovery relating to the Bebop Drone and MiniDrones should not have been granted based solely on Drone's suspicion. *See Micro Motion*, 894 F.2d at 1327 (explaining that "mere suspicion" of a product's infringement does not support discovery into that subject matter).

As for the on-board source code, Drone also failed to show its relevance or establish any need for the code as it relates to the operation of the accused products. In the Initial Motion, Drone identified both the off-board and onboard source code but only explained why it felt it needed the former. See J.A. 578–83. Drone even conceded at oral argument before us that it "did not talk specifically about the on-board source code in the [Initial Motion]." Arg. at 22:51–56, available at http://oralarguments.cafc. uscourts.gov/default.aspx?fl=2015-1892.mp3. In granting Drone's Initial and Second Motions, the district court failed to explain why "all" source code or even any source code was needed or relevant in this case. J.A. 5, 9. Thus, we find that the court acted in contravention of Federal Rule 26(b)(1) by ordering Parrot to produce its on-board source code—code which has never been shown to be relevant.13

<sup>13</sup> We also think the district court should have compared the needs of the case with both the burden placed on Parrot to produce "all source code" and the significant consequences that might result from unauthorized or inadvertent disclosure. Despite the well-intentioned provisions of protective orders designed to guard confidential information, "there may be circumstances in which even the most rigorous efforts of the recipient of such [sensitive] information to preserve confidentiality in compliance with . . . a protective order may not prevent inadvertent compromise." *In re Deutsche Bank Trust Co. Ams.*, 605 F.3d 1373, 1378 (Fed. Cir. 2010). In addition, it

We do not decide today whether the on-board source code is relevant to this case. However, we note that source code is not necessary in every case. See, e.g., Cochran Consulting, Inc. v. Uwatec USA, Inc., 102 F.3d 1224, 1231 (Fed. Cir. 1996) (vacating discovery order requiring the production of computer-programming code because the party seeking discovery had not shown that the code was necessary to the case). At this stage of the proceedings, it is far from clear that all source code whether off-board or on-board—is necessary to Drone's case. Nevertheless, on remand. Drone will have a chance to make a showing of need and relevance for the on-board source code, and Parrot will have a chance to dispute any such showings.

Taken together, the errors discussed above convince us that the district court abused its discretion in granting

is well recognized among lower courts that source code requires additional protections to prevent improper disclosure because it is often a company's most sensitive and most valuable property. See, e.g., Via Vadis Controlling GmbH v. Skype, Inc., No. Civ.A. 12-MC-193, 2013 WL 646236, at \*3 (D. Del. Feb. 21, 2013) (noting that source code might represent a company's "most sensitive and confidential property" and that, in "U.S. litigation, extreme measures are ordered to protect [its] confidentiali-As a result, district courts regularly provide for additional restrictions on discovery to account for the unique characteristics of source code. Indeed, after this case was decided, the Western District of Pennsylvania adopted more robust protections for source code. See W.D. Pa. App'x LPR 2.2 ¶¶ 12–19 (effective Dec. 5, 2015). Although there is no source-code exception to the production requirements of the Federal Rules, the district court should have considered these concerns in light of the proportionality requirements of Federal Rule 26(b)(2)(C).

Drone's Initial and Second Motions and in issuing the associated July 1 and July 25 Orders. Accordingly, the July 1 and July 25 Orders are vacated.<sup>14</sup>

2.

We turn next to the district court's default sanction. A dismissal or default is a "drastic" sanction, Poulis, 747 F.2d at 867, which is why the Third Circuit has "established [a] strong presumption against sanctions that decide the issues of a case," Ali, 788 F.2d at 958. Accordingly, a dismissal or default sanction is "disfavored absent the most egregious circumstances." United States v. \$8,221,877.16 in U.S. Currency, 330 F.3d 141, 161 (3d Cir. 2003). To determine whether a district court abused its discretion when imposing a default or dismissal sanction, the Third Circuit balances the six Poulis factors: (1) the extent of the party's personal responsibility; (2) whether the party had a history of dilatoriness; (3) whether the conduct of the party or the attorney was willful or in bad faith; (4) the meritoriousness of claims or defenses; (5) the prejudice to the adversary caused by the party's conduct; and (6) the effectiveness of sanctions other than dismissal or default. Poulis, 747 F.2d at 868; Ware v. Rodale Press, Inc., 322 F.3d 218, 221 (3d Cir. 2003) (citing Poulis, 747) F.2d at 868); Bull v. United Parcel Serv., Inc., 665 F.3d 68, 80 (3d Cir. 2012) (citing *Poulis*, 747 F.2d at 868). "[N]o single *Poulis* factor is dispositive," Ware, 322 F.3d at 222, and the Third Circuit has recognized that "not all of the *Poulis* factors need be satisfied in order to dismiss a complaint," Mindek v. Rigatti, 964 F.2d 1369, 1373 (3d

On remand, pursuant to LPR 1.4 (as amended in 2015), the parties "shall meet and confer promptly . . . for the purpose of determining whether any provisions in [the amended local patent rules] should be made applicable" to this case, paying particular attention to the amended provisions of App'x LPR 2.2  $\P$  12–19.

Cir. 1992). In this case, the district court concluded that five of the factors favor default, while one weighs neutrally. On that basis, the court imposed upon Parrot the sanction of a default judgment.

Before examining the district court's sanctions ruling, however, we address the preliminary question of whether, in fact, a *Poulis* analysis is required in this case. Specifically, it could be argued that, having ruled that the district court abused its discretion in issuing the July 1 and July 25 Orders, we should automatically vacate the district court's entry of a default judgment against Parrot for its failure to comply with those orders. There is authority supporting that approach. See, e.g., EEOC v. First Nat'l Bank of Jackson, 614 F.2d 1004, 1007–08 (5th Cir. 1980) (reversing dismissal sanction for refusal to comply with a discovery order because the sought-after information was "not properly discoverable" and thus "the district court should not have imposed a Rule 37 sanction upon appellant for refusing to reveal the information") (citing Dunbar v. United States, 502 F.2d 506, 509 (5th Cir. 1974)); Dole v. Local 1942, Int'l Bhd. of Elec. Workers, 870 F.2d 368, 376 (7th Cir. 1989) (reversing dismissal sanction for refusal to comply with a discovery order because "the district court abused its discretion by compelling discovery" and "such an abuse of discretion will not support a Rule 37(b) dismissal"). If followed, that course would obviate the need for a *Poulis* analysis. At the same time, however, there also is authority suggesting that abrogation of a discovery order does not automatically result in reversal of a sanction imposed for failure to comply with the order. See Chudasama v. Mazda Motor Corp., 123 F.3d 1353, 1366 (11th Cir. 1997) (explaining that an "important factor" in evaluating whether a district court abused its discretion in imposing severe sanctions upon a party for violating an order is "whether the entry of [the] order was itself an abuse of discretion"); Cotton v. Mass. Mut. Life Ins. Co., 402 F.3d 1267, 1292 (11th Cir. 2005) ("This is not to say, however, that sanctions based on erroneous discovery orders will never be upheld.")

The Third Circuit, whose law controls here, does not appear to have spoken on this question. Indeed, it did not state in *Poulis* (nor has it stated in any case since as far as we can tell) that a determination that a discovery order was an abuse of discretion obviates the need for a Poulis analysis when assessing a default or dismissal sanction that is based at least in part on failure to comply with the discovery order. We recognize that the Circuit has said that the validity of a civil contempt order is predicated on the merits of the underlying order that was violated. See, e.g., In re Grand Jury Proceedings Harrisburg Grand Jury 79-1, 658 F.2d 211, 217 n.13 (3d Cir. 1981) ("It is a well established principle that an order of civil contempt cannot stand if the underlying order on which it is based is invalid.") (quoting ITT Cmty. Dev. Corp. v. Barton, 569 F.2d 1351, 1356 (5th Cir. 1978)); John T. ex rel. Paul T. v. Del. Cty. Intermediate Unit, 318 F.3d 545, 559 (3d Cir. 2003) ("[I]t is well settled that the viability of a civil contempt order entered either to remedy past noncompliance or to coerce future compliance with a preliminary injunction hinges on the validity of the underlying injunction."). However, this case does not involve a civil contempt order. See Drone Techs., 303 F.R.D. at 265 (explaining that "treating [Parrot's] actions as contempt of court pursuant to Rule 37 would not meet the goals of sanctions"). Under these circumstances, and in view of the fact that neither Drone nor Parrot has presented argument on the question, we think the prudent approach is to conduct a *Poulis* analysis. As seen below, based upon that analysis, we conclude that the district court abused its discretion in imposing upon Parrot the sanction of a default judgment. Thus, even if weighing the *Poulis* factors is viewed as unnecessary given our holding that the district court abused its discretion in issuing the

July 1 and July 25 Orders, our conclusion (as informed by our *Poulis* analysis) on the issue of the court's sanction stands as an alternative ground for vacating the default judgment. We turn now to the *Poulis* factors.

# The extent of Parrot's personal responsibility

We begin by looking at Parrot's personal responsibility for not complying with the July 1 and July 25 Orders. The district court correctly found that Parrot was "personally involved in the decision to not produce required initial disclosures and, therefore, [was] responsible for [its] failure to comply with th[e] Court's discovery Orders." *Drone Techs.*, 303 F.R.D. at 262. The court heard testimony from Parrot's head of legal, who stated that she understood the court's orders and that Parrot would not produce the on-board source code until an appellate court compelled it to do so. *Id.* at 261 & n.4. Parrot also conceded its personal involvement in its opening brief. As a result, we see no reason to disturb the court's conclusion on this factor.

# History of dilatoriness & Willful or bad-faith conduct

In evaluating these factors together, the district court reviewed Parrot's various submissions to it relating to the discovery orders. The court found that Parrot understood its obligations and willfully chose not to comply, as evidenced by, inter alia, testimony from its head of legal that the July 1 Order was "crystal clear" and by its continuous attempts to make its on-board source code available for inspection even after the court clarified that production was required. Id. at 263-64. Finding that Parrot took "shifting" and "inconsistent" positions as the case progressed and that its noncompliance was a tactical decision, the court concluded that these factors weighed in favor of "serious sanctions." Id. at 262-65. We do not think Parrot should be faulted for requesting clarification of the July 1 Order or for seeking additional safeguards for its source code. We also think Parrot made clear that it was willing to make its on-board source code available for inspection, as permitted by LPR 3.1, which demonstrates that it was not seeking to hide information. Nevertheless, the record reflects that Parrot was fully aware of the consequences of its actions and that it vacillated, at least to some extent, on whether it intended to comply with the court's orders. Parrot indeed does not dispute that its positions "evolved over time," and it concedes that it should have informed the district court at the outset of its intention not to produce the on-board source code. The record therefore supports the court's findings on these factors.

The *Poulis* factors do not explicitly account for the propriety of a discovery order when considering the merits of a discovery sanction. Still, the Third Circuit has "recognized that a party sufficiently exercised over a discovery order may resist that order, be cited for contempt, and then challenge the propriety of the discovery order in the course of appealing the contempt citation." In re Flat Glass Antitrust Litig., 288 F.3d 83, 89 (3d Cir. 2002) (quoting MDK, Inc. v. Mike's Train House, Inc., 27 F.3d 116, 121 (4th Cir.1994)); see also Firestone Tire & Rubber Co. v. Risjord, 449 U.S. 368, 377 (1981). Even though Parrot took a circuitous path to its contempt hearing, it did what the Third Circuit envisions a party should do if it hopes to overturn a court's discovery order—it resisted the order and sought appellate review. Consequently, we think our conclusion above—that the court abused its discretion in issuing the July 1 and July 25 Orders sheds some favorable light on Parrot's decision not to comply and thereby reduces the extent to which its dilatoriness and willfulness weigh in favor of serious sanctions.

## Meritoriousness of claims or defenses

Despite the brevity of the court's analysis on this issue, we agree that this factor is neutral because both parties "advanced *prima facie* cases." *Drone Techs.*, 303

F.R.D. at 266. Parrot attempts to cast doubt on the court's finding by arguing that its defenses, if successful, would bar Drone's recovery. But this argument misses the point. The district court did not need to fully assess the merits of the parties' claims and defenses; it only needed to look to the pleadings. See Poulis, 747 F.2d at 869–70 ("A claim, or defense, will be deemed meritorious when the allegations of the pleadings, if established at trial, would support recovery by plaintiff or would constitute a complete defense."). Because Parrot has not shown that Drone's pleadings could not support recovery, we reject its arguments on this factor.

## Prejudice to Drone caused by Parrot

As for prejudice to Drone, we think the district court erred by concluding that this factor "weighs heavily toward the imposition of severe sanctions." Drone Techs., 303 F.R.D. at 262. The court found that Parrot's noncompliance with the July 1 and July 25 Orders prejudiced Drone by (1) preventing Drone from reviewing information before the claim-construction hearing scheduled for October 24, 2014, (2) inhibiting Drone's ability to prepare its case for trial, and (3) causing Drone to "expend substantial funds, time, and energy" on motions practice. *Id.* In our view, the record does not support the court's findings. Although the court did not specify what information Drone needed but did not receive, it presumably was referring to the on-board source code and documents relating to the Bebop Drone and MiniDrones. However, as discussed above, Drone has not shown that this information is relevant or necessary to its case, so the record does not support a finding that lacking this information prejudiced Drone in any way, whether for claimconstruction purposes or for trial.

Nor do we believe that Drone demonstrated that it was prejudiced by spending time and money on its motions and its responses to Parrot's motions. The Third

Circuit has stated that prejudice, for the purpose of Poulis, includes "the excessive and possibly irremediable burdens or costs imposed on the opposing party." Bull, 665 F.3d at 80 (quoting Scarborough v. Eubanks, 747 F.2d 871, 876 (3d Cir. 1984)). Although the district court deemed Drone's expenditures of time and money as being substantial, it did not state that they were "excessive" or "possibly irremediable." Furthermore, the court did not provide a quantitative analysis of Drone's lost time and money or provide any explanation of how this case is distinguishable from a garden-variety discovery dispute in terms of time and cost. Drone does not present any such arguments either on appeal. And neither the district court's ruling nor Drone's arguments on appeal point us to a case suggesting that the mere expenditure of time and money associated with filing motions amounts to prejudice for the purpose of a *Poulis* analysis.

The district court also stated that Drone was "no closer to obtaining complete initial disclosures" than it was on the day it filed the Initial Motion. *Drone Techs.*, 303 F.R.D. at 262. That conclusion, we think, overlooks that Parrot produced 14 million pages of documents and that Drone has never shown Parrot did not meet its obligations under LPR 3.1. Accordingly, because the apparent prejudice to Drone is unsubstantiated, we hold that this factor disfavors a severe sanction.

## Effectiveness of sanctions other than default

In our view, the remaining *Poulis* factor, the effectiveness of alternative sanctions, also militates against the sanction of default. In determining that default was the appropriate sanction, the district court stated that "monetary or other similar sanctions" would not "adequately account for or correct" the prejudice caused to Drone. *Id.* at 265–66. The court also emphasized the need to "penalize" and "deter others from taking similar action." *Id.* at 265. Lastly, the court concluded that

lesser sanctions "would not meet the goals of sanctions" and that Parrot should not be allowed to remedy the situation through self-imposed sanctions. *Id.* We find several problems with the court's analysis.

The court's analysis suggests it did not seriously consider alternative sanctions. As noted, the only real prejudice here was lost time, energy, and money. Had the court started with that premise, it would have determined that numerous, alternative sanctions were available to adequately account for any prejudice to Drone. Notwithstanding the "strong presumption" against a "drastic" sanction like default, the court rejected all alternatives without explanation.

We also question the court's stated need to "penalize" Parrot. While "all sanctions by their very nature involve an element of punishment," a court may not enter a default judgment against a defendant who failed to comply with a discovery order as "mere punishment." Gregorio v. First Rediscount Corp., 506 F.2d 781, 789 (3d Cir. 1974). Two facts suggest that the default sanction here was meant to serve as "mere punishment." First, as explained above, "the sanction invoked [was] more stern than reasonably necessary" to cure the actual prejudice to Drone. Id. And second, the record does not support the presumption that Parrot refused to provide its on-board source code because discovery of that information would have revealed the lack of merit in its defense against Drone's infringement case. See Ins. Corp. of Ir. v. Compagnie des Bauxites de Guinee, 456 U.S. 694, 705 (1982) (explaining that a proper application of Rule 37(b)(2) will, "as a matter of law," support "the presumption that the refusal to produce evidence material to the administration of due process was but an admission of the want of merit in the asserted defense") (citing Hammond Packing Co. v. Arkansas, 212 U.S. 322, 351 (1909)). To the contrary, the record indicates that Parrot repeatedly offered to make the on-board source code available for inspection. Parrot even offered to stipulate that all claim limitations relating to the "remote-controlled device" (i.e., limitations to which the on-board source might be relevant) are met if Drone could prove infringement of all of the "remote controller" limitations. In addition, Parrot proposed that the court sanction it by deeming all "remote-controlled device" limitations met or by precluding it from offering non-infringement defenses with respect to those limitations. Those offers are not indicative of a party trying to hide a smoking gun. Accordingly, we find that the district court abused its discretion in concluding that default was the only available remedy.

In sum, we conclude that the district court erred in its findings on prejudice and the availability of alternative sanctions and, consequently, erred in weighing the *Poulis* factors. We conclude that, on the facts of this case, those two factors outweigh the three factors suggesting that the imposition of severe sanctions was appropriate. Moreover, because "all sanctions originate from the realm of equity," Bull, 665 F.3d at 83, we believe our vacatur of the district court's discovery orders underscores the notion that a default sanction was improper here. simply, bearing in mind that, in the Third Circuit, a default sanction is "disfavored absent the most egregious circumstances," \$8,221,877.16 in U.S. Currency, 330 F.3d at 161, we think it would be illogical to uphold the sanction of default for Parrot's failure to comply with discovery orders which we have determined represented abuses of discretion. The district court's entry of default judgment against Parrot is vacated. The awards of damages and attorney fees which resulted from the entry of judgment against Parrot also are vacated.

Notwithstanding that we are vacating the district court's discovery orders and its entry of a judgment of default, we recognize that Parrot's actions displayed a measure of misconduct. That is, Parrot vacillated between positions of compliance and noncompliance and brought various motions that would have been unnecessary had it immediately subjected itself to a contempt hearing. Parrot acknowledges as much in its opening brief, stating that it "perhaps should have taken the position, at the outset, that it would not produce the [onboard source code without additional protections and asked for an immediately appealable sanction." Accordingly, on remand, in the event Drone again moves for sanctions for Parrot's prior conduct in this case, the district court may, in its discretion, consider whether lesser sanctions are warranted for such conduct. If the court chooses to consider sanctions, it should take into account, inter alia, Parrot's production to date, its efforts to comply with the actual requirements of LPR 3.1, and the extent of any actual prejudice caused to Drone. It also should take into account the fact that we have vacated the July 1 and July 25 Orders.

#### III.

Parrot has raised arguments in regard to the district court's evidentiary rulings relating to damages. Because we are vacating both the judgment of liability and the awards of damages and attorney fees, those arguments are now moot and we do not need to address them.

#### CONCLUSION

We hold that the district court has jurisdiction to entertain Drone's suit because Drone has standing. We also hold that the district court abused its discretion when it issued the July 1 and July 25 Orders and again abused its discretion when it entered a default sanction against Parrot for its failure to comply with those orders. We therefore vacate the district court's July 1 and July 25 Orders and the default judgment. With the default judgment against Parrot vacated, we also vacate the awards of damages and attorney fees against Parrot. The case is remanded to the district court for further proceedings consistent with this opinion.

# VACATED AND REMANDED

Costs

Each party shall bear its own costs.

# United States Court of Appeals for the Federal Circuit

DRONE TECHNOLOGIES, INC.,

Plaintiff-Appellee

v.

PARROT S.A., PARROT, INC.,

Defendants-Appellants

2015-1892, 2015-1955

Appeals from the United States District Court for the Western District of Pennsylvania in No. 2:14-cv-00111-AJS, Judge Arthur J. Schwab.

NEWMAN, Circuit Judge, concurring in the judgment.

I agree that the default judgment was inappropriately imposed, and I join the court's ruling. On the ensuing remand, the case would normally proceed to trial on the merits. I write separately to stress an issue of potentially threshold impact.

The record raises the question of inventorship, for the named sole inventor, Ms. Yu-Tuan Lee, testified that, "I came up with this idea about having the aircraft move following the motion of the remote controller," but when asked whether she knew "how to make that idea work," Ms. Lee answered, "I only came up with the ideas, and subsequently Bruce told me that there was such a chip that could detect movement." Lee Dep. at 66:19–67:4.

Precedent provides that "[o]ne who merely suggests an idea of a result to be accomplished, rather than means of accomplishing it, is not a joint inventor." Nartron Corp. v. Schukra U.S.A. Inc., 558 F.3d 1352, 1359 (Fed. Cir. 2009) (alteration in original).

Thus I do not share the view that it is unnecessary to undertake "a substantive examination of *inventorship* in order to resolve an issue of standing in an infringement action where the plaintiff's claim to title is not otherwise in dispute." Maj. Op. at 13. Inventorship affects not only the validity of the patent, but also ownership and transfer of ownership. See Beech Aircraft Corp. v. EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993) ("At the heart of any ownership analysis lies the question of who first invented the subject matter at issue, because the patent right initially vests in the inventor who may then, barring any restrictions to the contrary, transfer that right to another, and so forth."). There is no right to sue on patents one does not own. See Bd. of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys., 583 F.3d 832, 839 (Fed. Cir. 2009), aff'd, 563 U.S. 776 (2011) (absence of ownership can be raised "as a defense and a challenge to [the plaintiff's standing to maintain its action against [the defendant."). An incorrect inventor or inventive entity cannot pass title by assignment, because that entity has no title to pass.

Inventorship and standing appear to be critical to further proceedings. "The requirement that jurisdiction be established as a threshold matter 'spring[s] from the nature and limits of the judicial power of the United States' and is 'inflexible and without exception." Steel Co. v. Citizens for a Better Env't, 523 U.S. 83, 94–95 (1998) (alteration in original).