

United States Court of Appeals for the Federal Circuit

ANZA TECHNOLOGY, INC.,
Plaintiff-Appellant

v.

**MUSHKIN, INC., DBA ENHANCED NETWORK
SYSTEMS, INC.,**
Defendant-Appellee

2019-1045

Appeal from the United States District Court for the
District of Colorado in No. 1:17-cv-03135-MEH, Magistrate
Judge Michael E. Hegarty.

Decided: August 16, 2019

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CA, argued for plaintiff-appellant. Also represented by
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sented by THOMAS S. RICE, Senter Goldfarb & Rice LLC,
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Before PROST, *Chief Judge*, NEWMAN and BRYSON,
Circuit Judges.

BRYSON, *Circuit Judge*.

Plaintiff Anza Technology, Inc., (“Anza”) appeals from a decision of the United States District Court for the District of Colorado granting a motion by defendant Mushkin, Inc., dba Enhanced Network Systems, Inc., (“Mushkin”) to dismiss Anza’s second amended complaint. The dismissal followed from the court’s finding that Anza’s claim of damages for patent infringement was barred by the six-year statute of limitations in the Patent Act, 35 U.S.C. § 286. That ruling was based in turn on the court’s determination that the claims in Anza’s second amended complaint did not relate back to the date of Anza’s original complaint and were therefore time-barred. Because the district court’s application of the relation back doctrine was overly restrictive, we reverse in part, vacate in part, and remand for further proceedings.

I

A

Anza filed this action on March 28, 2017, in the United States District Court for the Eastern District of California, alleging that Mushkin had infringed claims 1, 14, and 16 of Anza’s U.S. Patent No. 7,124,927 (“the ’927 patent”), in violation of 35 U.S.C. § 271(a) and (g). The ’927 patent, entitled “Flip Chip Bonding Tool and Ball Placement Capillary,” relates to “dissipative and insulative ceramic flip chip bonding tools and capillaries for ball placement for bonding electrical connections.” ’927 patent, col. 1, ll. 39–41.

The specification of the ’927 patent discusses two techniques for bonding electronic components, such as semiconductor integrated circuit (“IC”) chips, to substrates, circuit

boards, or carriers. The two techniques are referred to as “wire bonding” and “flip chip bonding.” ’927 patent, col. 1, ll. 60–65. In wire bonding, the chip is oriented face-up, so that there is no direct electrical connection between the leads of the chip and the bond pads on the substrate. A wire is then used to connect the chip to the substrate. *Id.* at col. 1, ll. 43–61. In flip chip bonding, the chip is oriented face-down, which allows for a direct electrical connection between the chip and the substrate. The direct electrical connection is facilitated by conductive solder balls that are deposited on the chip; the solder balls provide the conductive path from chip to substrate. *Id.* at col. 1, ll. 61–65; col. 2, ll. 9–10; Fig. 3.

Under either technique, the bonding process requires the use of bonding tools. The ’927 patent explains that the problem with prior art bonding tools was that “an electrostatic discharge (ESD) from the bonding tool or transient currents from the machine [that uses the tool] can damage the very circuit the tool is bonding.” *Id.* at col. 2, ll. 47–49. According to the specification, “[c]ertain prior art devices have a one-or-more volt emission when the tip makes bonding contact. This could present a problem, as a one-volt static discharge can . . . cause the integrated circuit to fail.” *Id.* at col. 2, ll. 53–59.

To avoid damage to the electronic devices from such an electrostatic discharge, the ’927 patent recites a bonding tool tip for flip chip bonding that “conducts electricity at a rate sufficient to prevent charge buildup but not at so high a rate as to overload the device being bonded.” *Id.* at col. 2, line 67, through col. 3, line 2.

Claims 1, 14, and 16 of the ’927 patent, all independent claims, recite a system, a component, and a method, respectively. Claim 1 provides as follows:

1. A flip chip bonding tool and ball placement capillary system for connecting leads on integrated

circuit bonding pads, comprising a dissipative material having a resistance low enough to prevent a discharge of a charge to a device being bonded and high enough to stop current flow large enough to damage the device being bonded.

Claim 14 recites:

14. An ESD-preventive device comprising:

a flip chip bonding tool and ball placement capillary, comprising a dissipative material and configured to come in contact with a device being bonded, wherein a current produced by static charge generated during bonding is allowed to flow; wherein the dissipative material has a resistance low enough to prevent a discharge of charge to the device being bonded and high enough to stop all current flow to the device being bonded.

Claim 16 recites “[a] method of utilizing a flip chip bonding tool . . . in a microelectronic assembly.” The claimed method recites the use of a bonding machine capable of being equipped with a flip chip bonding tool, which has a tip comprising a dissipative material having the same properties as recited in claims 1 and 14.

B

On September 6, 2017, Anza filed its first amended complaint, which joined Avant Technology, Inc., as a co-defendant.¹ Thereafter, Mushkin filed a motion to dismiss or

¹ The first amended complaint alleged that Avant was “the sole aggregator of all Mushkin-based memory modules and board products . . . by virtue of Avant having acquired certain assets of Defendant Mushkin in accordance with an asset purchase agreement dated April 1, 2012.” Because there is no material difference between the original complaint and the first amended complaint for purposes of the

to sever the claims against Mushkin from those against Avant, and either to stay the case against Mushkin or to transfer the case to the District of Colorado. The California district court severed Anza's claims against Mushkin and transferred the case against Mushkin to the District of Colorado.

Following the transfer, Anza served infringement contentions against Mushkin pursuant to the District of Colorado's Local Patent Rules 4 and 5. The infringement contentions accused Mushkin of directly infringing claims 1 and 14, but did not refer to claim 16. Noting in its infringement contentions that discovery had not commenced and a formal scheduling order had not been entered, Anza stated that it reserved "the right to supplement these contentions as appropriate based upon further discovery and the schedule of this case, including but not limited to assertions related to new claims and/or patents as may be allowed through amendment of the operative pleading."

The parties then engaged in mediation. In the course of the mediation, Mushkin provided Anza with a declaration of George Stathakis, Mushkin's president, regarding the technology used by Mushkin. The Stathakis declaration stated, *inter alia*, that Mushkin "did not bond IC chips to boards or modules." Instead, according to the declaration, "[t]he memory products purchased by Mushkin, Inc. from suppliers were IC memory chips that were already . . . bonded on printed circuit boards or memory module boards." Additionally, the declaration stated that Mushkin's supplier "does not place or position solder ball connectors on the IC chip for use in bonding the IC chip to a printed circuit board or memory module board."

issues in this case, we focus on the differences between the original complaint and the second amended complaint.

The district court held a hearing to address Mushkin’s motion to dismiss. In light of information in the Stathakis declaration, Anza “agreed that its present claims [were] no longer viable.” Based on that concession, the district court granted Mushkin’s motion. However, the court ruled that Anza would be permitted to file an amended complaint and that Mushkin would be allowed to file a motion to dismiss that complaint.

C

Anza filed its second amended complaint on June 8, 2018. In the second amended complaint, Anza removed the infringement allegations regarding the ’927 patent and alleged infringement of two new patents: U.S. Patent Nos. 6,354,479 (“the ’479 patent”) and 6,651,864 (“the ’864 patent”). The new complaint alleged that Mushkin had infringed those patents under 35 U.S.C. § 271(g). Anza also omitted ten of the sixteen products that had been accused in the original complaint and added two new products that had not previously been accused.

The ’479 and ’864 patents, entitled “Dissipative Ceramic Bonding Tip” and “Dissipative Ceramic Bonding Tool Tip,” respectively, claim priority to the same U.S. provisional application as the ’927 patent. Like the ’927 patent, the ’479 and ’864 patents recite the use of “dissipative ceramic bonding tips for bonding electrical connections.” ’479 patent, col. 1, ll. 12–13; ’864 patent, col. 1, ll. 20–21. The patents offer the same solution to the problem of electrostatic discharge damage during the bonding process—providing a bonding tool tip that conducts electricity “at a rate sufficient to prevent charge buildup, but not at so high a rate as to overload the device being bonded.” ’479 patent, col. 2, ll. 4–6; ’864 patent, col. 2, ll. 11–13. The ’479 and ’864 patents differ from the ’927 patent in that they are directed to bonding tool tips for wire bonding, rather than for flip chip bonding. In addition, in contrast to the system

and component claims of the '927 patent, the asserted claims of the '479 and '864 patents (claims 39 and 28, respectively), are method claims. Claim 37 of the '479 patent, from which asserted claim 39 depends, recites as follows:

37. A method of using a bonding tip, comprising:

bonding a device using a bonding tip made with a dissipative material that has a resistance low enough to prevent a discharge of charge to said device and high enough to avoid current flow large enough to damage said device.

Similarly, independent claim 28 of the '864 patent recites:

28. A method of using an electrically dissipative bonding tool tip, having a resistance in the range of 10^5 to 10^{12} ohms, comprising:

providing the electrically dissipative bonding tool tip;

bonding a material to a device;

allowing an essentially smooth current to dissipate to the device, the current being low enough so as not to damage said device being bonded and high enough to avoid a build up of charge that could discharge to the device being bonded and damage the device being bonded.

D

Mushkin filed a motion to dismiss the second amended complaint. It argued, *inter alia*, that the new patent claims against Mushkin do not relate back to the date of Anza's original complaint. In support of that argument, Mushkin relied on Rule 15(c)(1)(B) of the Federal Rules of Civil Procedure, which provides: "An amendment to a pleading relates back to the date of the original pleading when . . . the amendment asserts a claim or defense that arose out of the

conduct, transaction, or occurrence set out—or attempted to be set out—in the original pleading.”

The district court granted Mushkin’s motion, ruling that the new infringement claims did not relate back to the date of the original complaint. The court explained that new infringement claims relate back to the date of the original complaint when the claims involve the same parties, the same products, and similar technology—i.e., when the claims are “part and parcel” of the original complaint. The court ruled that newly asserted claims of infringement do not relate back if the new claims are not an integral part of the claims in the original complaint and if proof of the new claims will not entail the same evidence as proof of the original claims.

With respect to the patent claims asserted in the original complaint as compared with those asserted in the second amended complaint, the district court found that “[a]lthough the claims involve the same parties, they do not relate to identical products and technology.” Comparing the ’864 and ’479 patents with the ’927 patent, the district court found that the asserted claims of the ’864 and ’479 patents “protect a method of using a wire bonding tool, while the ’927 claims involved a flip chip bonding and solder ball placement tool.” The district court acknowledged that the patent claims have the “same purpose—bonding integrated circuit chips to printed circuit boards while minimizing electrostatic discharge.” But because it found that “different processes and technologies are used to achieve this purpose,” the district court held that the patent claims are “not part and parcel of one another.” As for the accused products, the court noted that the second amended complaint added two new accused products and omitted a

number of accused products as compared with the original complaint.²

The district court added that “proving infringement of the initial and new claims would not involve substantially the same evidence.” The district court explained:

Proving the ’927 patent claims would require evidence of the flip chip bonding method and how the flip chip bonding and ball placement tool was used in making the allegedly infringing products. Conversely, proving the newly asserted claims requires evidence of the wire bonding process and how a wire bonding tool tip was used to produce the allegedly infringing products.

In particular, the court noted, the new claims would entail different evidence because Anza’s infringement contentions had dropped claim 16 of the ’927 patent, which the district court considered to be the claim from the first amended complaint that was most similar to the newly asserted claims.

The district court then addressed the effect of its rulings on the statute of limitations for patent claims, 35 U.S.C. § 286, which bars recovery for any infringement “committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action.”

² The district court misspoke with regard to the number of accused products omitted from the second amended complaint. The court stated that the second amended complaint omitted eleven of the products that were accused in the original complaint, but in fact the number of omitted products was ten. *Compare* Second Amended Complaint at 13, *Anza Tech., Inc. v. Mushkin, Inc.*, No. 1:17-cv-03135-MEH (D. Colo. June 8, 2018), ECF No. 75, *with* Complaint at 6–7, *Anza Tech., Inc. v. Mushkin, Inc.*, No. 1:17-cv-03135-MEH (D. Colo. Mar. 28, 2017), ECF No. 1.

Because Anza acknowledged that Mushkin’s allegedly infringing activity all took place more than six years before the filing date of the second amended complaint, the court held that the effect of ruling that the second amended complaint did not relate back to the filing date for the original complaint was that all the asserted claims in the second amended complaint were time-barred.

II

A

A preliminary question is whether Federal Circuit law, rather than regional circuit law, governs whether newly alleged claims in an amended complaint relate back to the date of the original complaint when the new claims are based on newly asserted patents.

We have previously held that “[a] procedural issue that is not itself a substantive patent law issue is nonetheless governed by Federal Circuit law if the issue pertains to patent law, if it bears an essential relationship to matters committed to our exclusive control by statute, or if it clearly implicates the jurisprudential responsibilities of this court in a field within its exclusive jurisdiction.” *O2 Micro Int’l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1364 (Fed. Cir. 2006) (quoting *Midwest Indus., Inc. v. Karavan Trailers, Inc.*, 175 F.3d 1356, 1359 (Fed. Cir. 1999)(en banc in relevant part)).

One example of such a procedural issue is a motion to sever in a patent case. We have held that “motions to sever are governed by Federal Circuit law because joinder in patent cases is based on an analysis of the accused acts of infringement, and this issue involves substantive issues unique to patent law.” *In re EMC Corp.*, 677 F.3d 1351, 1354 (Fed. Cir. 2012). As in the case of motions to sever, the determination of whether newly alleged infringement claims relate back to the original complaint also turns on

“an analysis of the accused acts of infringement.” *Id.* Therefore, we hold that this determination is also governed by Federal Circuit law.

B

The next question is what standard governs this court’s review of a district court’s application of the relation back doctrine.

Anza argues that this court should apply a *de novo* standard of review. Anza bases that argument on the fact that the district court dismissed the second amended complaint after holding the relation back doctrine inapplicable, and that dismissals of a complaint under Fed. R. Civ. P. 12(b)(6) are subject to *de novo* review.

The problem with Anza’s argument is that the dismissal in this case was the necessary consequence of the court’s determination that the relation back doctrine does not apply, since without the benefit of the relation back doctrine, it is clear that the statute of limitations would bar all of Anza’s claims against Mushkin. What Anza is challenging is not the dismissal itself, but whether the district court properly applied the relation back doctrine under Rule 15(c). The standard of review that applies to a dismissal under Rule 12(b)(6) therefore has nothing to do with the critical issue in this case, which is whether the court properly determined not to apply the relation back doctrine to the second amended complaint. For that reason, Anza’s argument sheds no light on what standard should be applied in reviewing that issue.

Mushkin argues that the district court’s ruling on the relation back issue should be reviewed under the abuse of discretion standard. In arguing for that standard, Mushkin relies on two decisions of this court, but the cases Mushkin cites do not support its argument. In the first case, *Fromson v. Citiplate, Inc.*, the court merely stated that it found “no reversible error” in the district court’s

conclusion that the amended complaint related back to the date of the original complaint. 886 F.2d 1300, 1304 (Fed. Cir. 1989). The court did not specify what standard of review it applied in reaching that conclusion. The second case, *Datascope Corp. v. SMEC, Inc.*, 962 F.2d 1043 (Fed. Cir. 1992), did not deal with the relation back doctrine at all. The court in that case merely held that the district court's refusal to permit amendment of the complaint was not an abuse of discretion. *Id.* at 1047. While *Datascope* applied the abuse of discretion standard to the question whether the district court erred in denying a motion to amend a complaint under Fed. R. Civ. P. 15(a), nothing in *Datascope* speaks to the standard of review to be applied to the separate question of whether an amended pleading relates back to the date of the original pleading under Fed. R. Civ. P. 15(c).

Mushkin's suggestion that we review the district court's relation back ruling under an abuse of discretion standard would be contrary to the law of most of the other circuits, which have adopted a *de novo* standard when reviewing decisions regarding whether an amended pleading relates back to the date of the original pleading. *See Glover v. FDIC*, 698 F.3d 139, 144 (3d Cir. 2012); *Robinson v. Clipse*, 602 F.3d 605, 607 (4th Cir. 2010); *Slayton v. Am. Express Co.*, 460 F.3d 215, 227–28 (2d Cir. 2006); *Young v. Lepone*, 305 F.3d 1, 14 (1st Cir. 2002); *Miller v. Am. Heavy Lift Shipping*, 231 F.3d 242, 246–47 (6th Cir. 2000); *Delgado-Brunet v. Clark*, 93 F.3d 339, 342 (7th Cir. 1996); *Slade v. U.S. Postal Serv.*, 875 F.2d 814, 815 (10th Cir. 1989); *Percy v. S.F. Gen. Hosp.*, 841 F.2d 975, 978 (9th Cir. 1988). *Contra Powers v. Graff*, 148 F.3d 1223, 1226 (11th Cir. 1998) (application of Rule 15(c) is reviewed for abuse of discretion, while findings of fact necessary for application of the rule are reviewed for clear error).

We adopt the majority rule. The rationale underlying that rule, when it has been expressed, is that the *de novo*

standard of review applies because determining whether the amended claim “arose out of the conduct, transaction, or occurrence” set forth in the original complaint requires the reviewing court to apply the legal standard of Rule 15(c) “to a given set of facts,” which is “a task we are no less suited to perform than the district court.” *Miller*, 231 F.3d at 247; *accord Percy*, 841 F.2d at 978; *Lundy v. Adamar of N.J., Inc.*, 34 F.3d 1173, 1177 (3d Cir. 1994). In some instances, however, factual issues may need to be addressed as part of the district court’s analysis of the relation back issue. With respect to any disputed facts that are material to the relation back issue, we are not as well situated as the district court to make the appropriate findings. Therefore, in the event that such factual issues arise, we would review any findings by the district court on those issues for clear error, as we do in analogous circumstances. *See, e.g., Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1375 (Fed. Cir. 2017) (indefiniteness); *Par Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1194 (Fed. Cir. 2014) (obviousness); *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1188 (Fed. Cir. 2014) (enablement); *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1377 (Fed. Cir. 2007) (presence of a case or controversy); *Rambus Inc. v. Infineon Techs. AG*, 318 F.3d 1081, 1087–88 (Fed. Cir. 2003) (attorney fee award); *In re Emert*, 124 F.3d 1458, 1460 (Fed. Cir. 1997) (double patenting).

C

The Supreme Court has interpreted the relation back doctrine liberally, to apply if an amended pleading “relate[s] to the same general conduct, transaction and occurrence” as the original pleading. *Tiller v. Atl. Coast Line R.R. Co.*, 323 U.S. 574, 580–81 (1945) (holding, in a railroad negligence case that even though the amended complaint alleged a different theory of negligence, the new charge related back to the original complaint because “[t]he cause of action now, as it was in the beginning, is the

same—it is a suit to recover damages for the alleged wrongful death of the deceased.”). That liberal interpretation of the relation back rule reflects the rationale of Rule 15(c), which is that “a party who has been notified of litigation concerning a particular occurrence has been give all the notice that statutes of limitations were intended to provide.” *Baldwin Cty. Welcome Ctr. v. Brown*, 466 U.S. 147, 149 n.3 (1984).

Our predecessor court, the Court of Claims, embraced that liberal, notice-based interpretation of Rule 15(c). *See Snoqualmie Tribe of Indians v. United States*, 372 F.2d 951, 961 (Ct. Cl. 1967) (“A restrictive view would limit application of the rule to minor pleading mistakes. We think modern practice requires a more imaginative approach, and that [Rule 15(c)] should be read liberally to permit an amended pleading to relate back where there is sufficient notice.”); *see also Vann v. United States*, 420 F.2d 968, 974 (Ct. Cl. 1970) (“The test for determining whether the new matter in an amended petition arose from the ‘conduct, transaction, or occurrence’ first pleaded is whether the general fact situation or the aggregate of the operative facts underlying the claim for relief in the first petition gave notice to the [accused party] of the new matter.”); *United States v. N. Paiute Nation*, 393 F.2d 786, 790 (Ct. Cl. 1968) (“Sufficient notice to the Government is the test . . . with our inquiry focusing on the notice given by the general fact situation set forth in the original pleading.”) (citations and footnote omitted)).

Federal Circuit cases have applied a similar approach to Rule 15(c). *See Korody-Colyer Corp. v. Gen. Motors Corp.*, 828 F.2d 1572, 1575 (Fed. Cir. 1987) (“Under Rule 15(c) . . . an amendment may relate back when the earlier complaint gave adequate notice of the new claim.”); *see also Barron Bancshares, Inc. v. United States*, 366 F.3d 1360, 1369–70 (Fed. Cir. 2004); *Intrepid v. Pollock*, 907 F.2d 1125, 1130 (Fed. Cir. 1990).

The notice-based interpretation of Rule 15(c) is consistent with the approach used under Rules 13(a) and 20(a) of the Federal Rules of Civil Procedure. Those rules, which share the “same transaction or occurrence” standard used in Rule 15(c), have been interpreted to require that counterclaims (in the case of Rule 13(a)) or the claims of the plaintiffs to be joined (in the case of Rule 20(a)) be logically related to the claims in the original complaint. *See In re EMC Corp.*, 677 F.3d at 1357–58.

The “logical relationship” standard contemplates a “liberal approach to the concept of same transaction or occurrence.” 7 Charles Alan Wright et al., *Federal Practice & Procedure* § 1653, at 410–11 (3d ed. 2001). It asks whether the facts underlying the alleged claims “share an aggregate of operative facts.” *In re EMC Corp.*, 677 F.3d at 1359. For purposes of the logical relationship test, “all logically related events entitling a person to institute a legal action against another generally are regarded as comprising a transaction or occurrence.” 7 Charles Alan Wright et al., *Federal Practice & Procedure* § 1653, at 409.

In light of the similarity in the language used in Rule 15(c) and Rules 13(a) and 20(a), cases applying the logical relationship test in the patent context are particularly instructive in applying the relation back doctrine. Those cases suggest that pertinent considerations bearing on whether claims are logically related include the overlap of parties, products or processes, time periods, licensing and technology agreements, and product or process development and manufacture. *See In re EMC Corp.*, 677 F.3d at 1359–60; *Futurewei Techs., Inc. v. Acacia Research Corp.*, 737 F.3d 704, 710 (Fed. Cir. 2013) (“Here, the logical relationship is strong: the license agreement gives rise to Huawei’s alter-ego claim, to SmartPhone’s affirmative right to enforce the patents in the Texas case, and to Huawei’s defense in that case”); *see also In re Rearden LLC*, 841 F.3d 1327, 1332 (Fed. Cir. 2016) (noting that the

logical relationship test is one of three tests used to determine whether the transaction-or-occurrence test is met under Rule 13(a), and finding the counterclaim compulsory because, *inter alia*, “the claims and counterclaims share a close, logical relation: the ownership and rightful use of the technology claimed and disclosed in the MOVA patents”).

Several district courts have addressed the issue of whether newly alleged claims, based on separate patents, relate back to the date of the original complaint. Most of those courts have employed a similar analysis, asking whether the newly asserted patents are “part and parcel” of the original controversy. For example, in *Halo Electronics, Inc. v. Bel Fuse Inc.*, No. C-07-06222 RMW, 2008 WL 1991094, at *3 (N.D. Cal. May 5, 2008), the court found that the six Halo patents that were the subjects of the new claims were not “part or parcel” of the original complaint, which involved another patent, because “the Halo patents involve[d] different technologies and products.” On the other hand, the court in *PerfectVision Manufacturing, Inc. v. PPC Broadband, Inc.*, 951 F. Supp. 2d 1083, 1093, 1093–94 (E.D. Ark. 2013), found that the amended complaint related back to the date of the original complaint, after considering whether the patents cited in the two complaints involved “the same field of art, the same fundamental science and technology . . . [,] the same allegedly infringing devices, and, in any damages analysis, the same pricing, sales, and related market data.”

Accordingly, in determining whether newly alleged claims, based on separate patents, relate back to the date of the original complaint, we will consider the overlap of parties, the overlap in the accused products, the underlying science and technology, time periods, and any additional factors that might suggest a commonality or lack of commonality between the two sets of claims. At bottom, however, the question remains whether the general factual situation or the aggregate of operative facts underlying the

original claim for relief gave notice to Mushkin of the nature of the allegations it was being called upon to answer.

D

On appeal, Anza challenges the district court's conclusion that the second amended complaint did not relate back to the date of the original complaint. Anza argues that the '864, '479, and '927 patents all seek to solve the same problem—avoiding damage to delicate devices as a result of ESD—and that the three patents all employ the same solution to address that problem—using dissipative ceramic tips on the bonding tools.

Anza also argues that there is a significant overlap of properties between the two sets of accused Mushkin products. According to Anza, each accused product in both the original complaint and the second amended complaint requires the use of certain techniques and methods to guard against damaging ESD events, which include compliance with standards that “involve[] the use of manufacturing tools made of dissipative materials having resistance ranges low enough to prevent a discharge of a charge to an ESD sensitive device but high enough to avoid current flows that may damage the device.”

Mushkin disagrees. According to Mushkin, the allegations in the second amended complaint are significantly different from the initial “flip chip” infringement allegations, for several reasons.

Mushkin first argues that the fact that the second amended complaint withdrew all prior claims of infringement under the “flip chip” '927 patent and substituted claims from the two “wire bonding” patents indicates that the two complaints address entirely different bonding techniques. We disagree.

While the patents address different bonding techniques, they all share the same underlying technology. All

three patents are focused on solving the same problem by the same solution, using a bonding tool tip made of a dissipative material having a resistance low enough to prevent the discharge of a charge to a device being bonded and high enough to avoid current flow to that device. '927 patent, col. 2, line 64, through col. 3, line 2; '479 patent, col. 2, ll. 3–6; '864 patent, col. 2, ll. 11–13. Moreover, while the specifications of the '479 and '864 patents discuss only wire bonding, the asserted claims of those patents are not limited to the wire bonding technique. Both claim 39 of the '479 patent and claim 28 of the '864 broadly recite methods of using bonding tips more generally.

The use of bonding tool tips made of a dissipative material is the basis for the charges of infringement alleged in each of the complaints. According to the complaints, industry-recognized standards-setting organizations have set standards for certain ESD-sensitive devices, including IC chips, that require the use of manufacturing tools made of dissipative materials. The complaints thus target products assembled or manufactured in ways that meet or exceed industry standards for reducing the risk of damage to ESD-sensitive devices. This technological overlap suggests that the aggregate of operative facts underlying infringement under the '927 patent in the original complaint gave notice of the substance of the claims of infringement under the '479 and '864 patents in the second amended complaint.

To be sure, the original complaint differs from the second amended complaint in that the original complaint was limited to products manufactured using flip chip bonding. But the type of bonding technique is of secondary importance compared with the use of manufacturing tools made of dissipative material. Contrary to the district court's conclusion, proving infringement would only require evidence that certain bonding tools were used, not evidence as to how those tools were used. That determination would not be likely to result in a substantially different

evidentiary showing to prove infringement of the claims asserted in the second amended complaint.

Mushkin next argues that, before the filing of the second amended complaint, Anza narrowed its infringement claims in a way that distinguished its claims from the claims set forth in its original complaint. In what the district court characterized as Anza's "informal infringement contentions," Anza did not assert the previously pleaded 35 U.S.C. § 271(g) statutory basis for infringement, and it did not assert its previously pleaded allegations regarding "method of use" claim 16 of the '927 patent. The infringement contentions thus asserted only system and component claims 1 and 14, and alleged a theory of direct infringement only under 35 U.S.C. § 271(a). Subsequently, however, in the second amended complaint, Anza asserted infringement of "method of use" claims from the two new patents and alleged infringement under 35 U.S.C. § 271(g).

In light of this sequence of events, Mushkin argues that the second amended complaint changed not only the type of claims asserted, but also the statutory basis for infringement and the party alleged to have conducted the accused bonding activity (a shift from Mushkin to an upstream manufacturer). Those changes between the theory of infringement set forth in the infringement contentions and allegations in the second amended complaint, according to Mushkin, show that there were substantial differences between the new and old claims.

Mushkin treats the infringement contentions as irreversibly narrowing the scope of the original complaint. In fact, however, Anza asserted that the infringement contentions were "preliminary, and based solely on public information." Moreover, in the infringement contentions, Anza reserved the right "to supplement the[] contentions as appropriate based upon further discovery and the schedule of th[e] case."

Apart from Anza's reservation of the right to supplement, the District of Colorado Local Patent Rules permit amendments to infringement contentions. According to Rule 16 of the Local Patent Rules, amendments to the infringement contentions, including the addition of accused products or processes, are permissible upon a showing of good cause, such as the discovery of previously undiscovered information. D. Colo. Local Patent Rule 16(a)(3); see *O2 Micro*, 467 F.3d at 1366 ("If a local patent rule required the final identification of infringement and invalidity contentions to occur at the outset of the case, shortly after the pleadings were filed and well before the end of discovery, it might well conflict with the spirit, if not the letter, of the notice pleading and broad discovery regime created by the Federal Rules."). The discoveries made as a result of the Stathakis declaration, including that Mushkin does not bond IC chips to boards or modules, but instead purchases pre-bonded chips from suppliers, would likely constitute good cause to supplement Anza's infringement contentions by adding claim 16 and the section 271(g) theory of infringement.

Setting aside Mushkin's assertion that Anza's infringement contentions waived claim 16 and the section 271(g) theory of infringement, Mushkin's arguments largely fall away. The original complaint alleged infringement of "each of the limitations of independent claims 1, 14, and 16 of the '927 patent in violation of 35 U.S.C. § 271(a) and (g)." Complaint at 8, *Anza Tech., Inc. v. Mushkin, Inc.*, No. 1:17-cv-03135-MEH (D. Colo. Mar. 28, 2017), ECF No. 75. Similarly, the second amended complaint asserted infringement of "method of use" claims of the '479 and '864 patents under 35 U.S.C. § 271(g). Second Amended Complaint at 17, 20, *Anza Tech., Inc. v. Mushkin, Inc.*, No. 1:17-cv-03135-MEH (D. Colo. June 8, 2018), ECF No. 75. Both complaints therefore alleged infringement of "method of use" claims under 35 U.S.C. § 271(g), such that the allegations of

infringement in both the old and new claims would entail activities conducted by upstream manufacturers. Accordingly, there is a substantial overlap in the underlying facts alleged in each of the complaints.

Mushkin's next argument is that the time frame when infringement liability was allegedly incurred is significantly different in the second amended complaint compared to the original complaint. According to Mushkin, the second amended complaint changed the relevant time period from infringement that occurred within the six-year period preceding March 2017 to infringement that occurred between March 2011 and April 1, 2012. *See* Appellee Br. 38. But Mushkin fails to explain how the second time period, which is wholly encompassed within the first, can be regarded as distinctly different from the first. There is no lack of notice and no substantial prejudice to Mushkin from having to defend against independent claims over a *shorter* period than the period set forth in the original complaint.

At several points, Mushkin argues that Anza's admission that the infringement allegations in the original complaint were non-viable dooms its relation back argument. Mushkin reasons that if the infringement claims in the second amended complaint are similar enough to the infringement claims in the original complaint to relate back to the date of the original complaint, the infringement claims in the second amended complaint must also be non-viable. Alternatively, Mushkin argues that if the current claims are viable because they are not the same as the original ones, the current claims should not relate back to the date of the original complaint.

That argument falls with its premise. Amended claims do not have to be the same as the original claims to relate back. Rather, the claims must arise out of the same conduct, transaction, or occurrence. In any event, the record contains no explanation for the non-viability of the original

claims, so there is no basis for concluding that Anza's concession that the original claims were non-viable means that the claims in the second amended complaint must be so different from the original claims that they cannot relate back to the date of the original complaint.

Mushkin further contends that applying the relation back doctrine in this case would allow litigants to evade the statute of limitations by bootstrapping old claims onto new ones, thus rendering the statute of limitations a nullity. To the contrary, while the relation back doctrine alters the starting point for the statute of limitations, that starting point can never be earlier than the filing date of the original complaint. And in order for the relation back doctrine to apply at all, the allegations of the amended complaint must be tethered to the conduct, transactions, or occurrences underlying the original claims.

Finally, Mushkin argues that “[w]ith the filing of the Second Amended Complaint, two-thirds of the accused products changed, including the addition of two new accused products.” That characterization of the change in the set of accused products is misleading. In fact, the second amended complaint omits ten of the original sixteen products from the list of accused products. The omission of those products has no prejudicial effect on Mushkin and does not deprive Mushkin of notice of any new allegations. The other six products—Redline, Blackline, Radioactive, Silverline, Proline, and Essentials—have been accused in all three complaints. With regard to those six products, the second amended complaint and the original complaint would likely present closely related issues.

The same, however, is not true for the two remaining products, the Ridgeback and Apple products, which were added for the first time in the second amendment complaint. Courts that have addressed the issue of whether newly alleged claims, based on separate patents, relate

back to the date of the original complaint, have regarded the presence of newly accused products as a substantial factor weighing against the application of the relation back doctrine. See *PerfectVision*, 951 F. Supp. 2d at 1093–94; *Halo Elecs.*, 2008 WL 1991094, at *3; see also *Mann Design Ltd. v. Bounce, Inc.*, 138 F. Supp. 2d 1174, 1179 (D. Minn. 2001) (finding no relation back, in part because “[t]here are no allegations in the Complaint or the Amended Complaint indicating that the products accused of infringing the ’061 patent are the same as those which allegedly infringe either the ’559 and ’053 patent.”). The rationale for that rule is that it is improbable that allegations regarding different products, involving different patents, would have a common core of operative facts. It is therefore an open question whether the allegations regarding the two newly accused products, which are alleged to have infringed the latter two patents, are too far afield from the original complaint to put Mushkin on notice of the allegations against which it would be required to defend.

Resolution of that issue requires an analysis of facts that are not before us and as to which the district court is uniquely situated to rule. A remand for further proceedings is therefore necessary so that the district court can determine whether the infringement claims as to those two products are sufficiently similar to the infringement claims in the original complaint to justify application of the relation back doctrine to those products.

III

We hold that the claims in the second amended complaint that relate to the six originally accused products—the Redline, Blackline, Radioactive, Silverline, Proline, and Essentials products—relate back to the date of the original complaint under Rule 15(c). For those products, section 286 does not wholly bar an award of damages. The grant of the motion to dismiss as to those products must

therefore be reversed. For the products that were added for the first time in the second amended complaint—the Ridgeback and Apple products—we vacate the order of dismissal and remand for the district court to determine, based on a factual analysis in light of the legal standard set forth above, whether the allegations regarding those products should relate back to the filing date of the original complaint.

**REVERSED IN PART, VACATED IN PART, AND
REMANDED**