A New Era for Patent Infringement Pleading: *Twombly*, *Iqbal*, and the Demise of Form 18

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I. Introduction

Every civil action begins with the filing of a complaint.¹ Thus, pleading is the first battle that a plaintiff must fight to get any civil action into the courts. Consequently, "[f]ew issues in civil procedure jurisprudence are more significant than pleading standards, which are the key that opens access to courts."²

Since the beginning of the twentieth century, the pleading standard for patent infringement cases has gone through several major changes. The adoption of the Federal Rules of Civil Procedure in 1938 established the "notice pleading" standard and ended the era of code pleading.³ Seven decades later, the Supreme Court in its landmark decisions, *Twombly* and *Iqbal*, replaced the notice pleading standard with a plausibility pleading standard.⁴ After *Twombly* and *Iqbal*, the lower courts wrestled with the continued validity of Form 18 in the Appendix Forms of the Federal Rules of Civil Procedure.⁵ Now, we are at another important turn of the law on pa-

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² Phillips v. Cnty. of Allegheny, 515 F.3d 224, 230 (3d Cir. 2008).

³ Jonathan L. Moore, *Particularizing Patent Pleading: Pleading Patent Infringement in A Post-Twombly World*, 18 Tex. INTELL. PROP. L.J. 451, 471-72 (2010).

⁴ Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007); Ashcroft v. Iqbal, 556 U.S. 662 (2009).

⁵ Fed. R. Civ. P. Form 18; see also, e.g., In re Bill of Lading Transmission & Processing Sys. Pat.

tent infringement pleading, with the recent abrogation of the Rule 84 and Form 18.6

This essay reviews the evolution of patent infringement pleading standards, makes recommendations on what the courts should require for the heightened pleading standard under *Twombly* and *Iqbal*, and argues why these changes would be good for businesses and promote innovation. Section II reviews the start of the plausibility pleading standard under *Twombly* and *Iqbal*, and the complications caused by Form 18. Section III summarizes the current divided standards for different types of patent infringement pleading. Section IV summarizes the district courts' experiments to hash out what the heightened standard requires. Finally, in Section V, I make several recommendations on what the courts should require under the heightened pleading standard, and their potential impacts on several major players in patent litigation.

II. Twombly, Iqbal, and Form 18

Rule 8 of the Federal Rules of Civil Procedure provides: "A pleading that states a claim for relief must contain . . . a short and plain statement of the claim showing that the pleader is entitled to relief." The Federal Rules of Civil Procedure were adopted in 1938 as a response to the pitfalls of code pleading and were intended to provide a new standard for the level of detail needed in a complaint. In general, the new pleading standard was considered as the start of "notice pleading" for civil actions. The goal of the new notice pleading standard was that "pleadings would merely put a party on notice and that facts, as well as the specifics of claims, would be fleshed out through the discovery process." The "notice pleading" standard essentially encourages pleading with simplicity, and a plaintiff's complaint is arguably less vulnerable to a Rule 12(b)(6) motion to dismiss than under the "code pleading" standard before 1938.

In its landmark case *Conley v. Gibson*, the Supreme Court took a liberal interpretation of the notice pleading standard as required by Rule 8.¹¹ The Court explained that "[s]uch simplified 'notice pleading' is made possible by the liberal opportunity for discovery and the other pretrial procedures established by the Rules to disclose more precisely the basis of both claim and defense and to define more narrowly the disputed facts and issues." According to the Court, Rule 8's requirement of only "a short and plain statement of the claim" is to "give the defendant fair no-

Lit. (R+L Carriers, Inc. v. DriverTech LLC), 681 F.3d 1323 (Fed. Cir. 2012).

See Administrative Office of the U.S. Courts, Summary of the Report of the Judicial Conference Committee on Rules of Practice and Procedure, at Rules-13 (September 2014), available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Reports/ST09-2014.pdf.

⁷ Fed. R. Civ. P. 8(a).

⁸ Moore, *supra* note 3, at 471.

⁹ *Id.* at 472.

Fed. R. Civ. P. 8(12(b)(6) (A pleading may be dismissed for "failure to state a claim upon which relief can be granted.").

¹¹ Conley v. Gibson, 355 U.S. 41 (1957).

¹² *Id.* at 47-48.

tice of what the . . . claim is and the grounds upon which it rests."¹³ More importantly, the Supreme Court sets an extremely liberal standard of notice pleading: "[A] complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove *no set of facts* in support of his claim which would entitle him to relief."¹⁴ This "no set of facts" standard would govern the pleading for all civil actions in the federal courts for 50 years until the Supreme Court changed course in 2007.

A. From notice pleading to plausibility pleading

In 2007, five decades after the *Conley* ruling, the Supreme Court eventually decided in *Bell Atlantic Corp. v. Twombly* that the "no set of facts" language from *Conley* had "puzzl[ed] the profession for years" and "earned its retirement." The *Twombly* decision would again change the landscape of the pleading standard for civil actions.

1. Twombly: The start of plausibility pleading

After retiring the "no set of facts" language from *Conley*, the Supreme Court replaced the notice pleading standard with a plausibility standard. ¹⁶ The plausibility standard, the Court explains, requires that "[f]actual allegations must be enough to raise a right to relief above the speculative level," and there must be "enough facts to state a claim to relief that is plausible on its face." ¹⁷ The Court proclaims that:

While a complaint attacked by a Rule 12(b)(6) motion to dismiss does not need detailed factual allegations, a plaintiff's obligation to provide the "grounds" of his "entitlement to relief" requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do. 18

Consequently, to meet the "fair notice" requirement, a complaint must state at least factual allegations in order to make it "plausible" that later discovery will likely reveal sufficient evidence to prove the truth of the allegations.

2. *Iqbal*: Plausibility for all civil actions

The state of the law regarding the pleading standard was anything but clear immediately after *Twombly*. The main concern of *Twombly* was discovery abuse. Throughout the opinion, the Supreme Court expressed its concerns about the "enormous expense" of antitrust discovery and the possibility of discovery abuse by

¹³ *Id.* at 47.

¹⁴ *Id.* at 45-46 (emphasis added).

¹⁵ Bell Atl. Corp. v. Twombly, 550 U.S. 544, 562-63 (2007).

¹⁶ *Id.* at 561-63, 570.

¹⁷ *Id.* at 555, 570.

¹⁸ *Id.* at 555 (internal citation omitted).

a plaintiff's meritless claim. ¹⁹ Therefore, immediately after the high Court's ruling, the circuit courts split over how broadly to read the *Twombly* decision. ²⁰ There were strong arguments that *Twombly* should be limited to antitrust cases, or complex civil actions which involve "potentially enormous expense of discovery." ²¹ Therefore, according to this argument, in non-complex cases where there was no threat of enormous expense of discovery, the notice pleading standard under *Conley* still applies. Adding to the strength of the argument was the fact that the Supreme Court never entirely overturned *Conley* in *Twombly*; rather, it only explicitly targeted the "no set of facts" language. ²² Moreover, the Court specifically stated that it was not creating a heightened pleading standard. ²³

This uncertainty among the appellate courts was settled two years later by the Supreme Court in another landmark case, *Ashcroft v. Iqbal.*²⁴ In *Iqbal*, the Court officially pronounced that the *Twombly* plausibility standard applies to not only antitrust or complex civil actions, but to all federal civil actions.²⁵

B. Validity of Form 18 after Twombly and Iqbal

Because patent infringement actions are merely a specific type of civil action, the *Twombly/Iqbal* plausibility standard also applies to pleadings of patent infringement actions. However, complication arises when a plaintiff uses Form 18 included in the Appendix Forms of the Federal Rules of Procedures.

1. Form 18 and Rule 84

The Appendix Forms of the Federal Rules of Procedure have a number of forms, including Form 18, which is an illustrative form for "Complaint for Patent Infringement."²⁶ In essence, Form 18 requires the following information:

- (1) an allegation of jurisdiction; (2) a statement that the plaintiff owns the patent;
- (3) a statement that defendant has been infringing the patent "by making, selling, and using [the device] embodying the patent"; (4) a statement that the plaintiff has given the defendant notice of its infringement; and (5) a demand for an injunction and damages.²⁷

¹⁹ Id. at 559 ("[T]he threat of [enormous] discovery expense will push cost-conscious defendants to settle even anemic cases before reaching those proceedings.").

Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in a Post-Twombly World, 18 Tex. Intell. Prop. L.J. 451, 472, 475 (2010).

See generally Robbins v. Okla., 519 F.3d 1242, 1248 (10th Cir. 2008) (noting that Twombly involved the potential imposition of the "potentially enormous expense of discovery" on the defendants).

²² See generally Twombly, 550 U.S. 544.

²³ *Id.* at 570.

²⁴ Ashcroft v. Iqbal, 556 U.S. 662 (2009).

²⁵ *Id.* at 684.

²⁶ Fed. R. Civ. P. Form 18.

²⁷ McZeal v. Sprint Nextel Corp., 501 F.3d 1354, 1356-57 (Fed. Cir. 2007) (alteration in original)

On its face, Form 18 appears to be insufficient under the *Twombly/Iqbal* plausibility pleading standard, because it does not require enough facts to move the case over the line of "plausibility." However, Rule 84 adds to the complication by stating that "[t]he forms in the Appendix suffice under these rules and illustrate the simplicity and brevity that these rules contemplate." Because Form 18 and Rule 84 were developed when the notice pleading standard was adopted in 1938, long before *Twombly* and *Iqbal*, there is a potential contradiction between the two requirements. Therefore, for a period after *Twombly* and *Iqbal*, the continued validity of Form 18 was frequently debated.

2. McZeal: Federal Circuit's first pass on continued validity of Form 18

Several months after *Twombly* but before *Iqbal*, the Federal Circuit was presented with the first opportunity to pass on the continued validity of Form 18 (then numbered as Form 16) under the plausibility standard.³⁰ McZeal, a *pro se* plaintiff, appealed the district court's granting of defendant's Rule 12(b)(6) motion to dismiss because the district court ruled that "there just aren't any facts" in the complaint for patent infringement.³¹ The Federal Circuit vacated the dismissal and held that the plaintiff's "complaint contain[ed] enough detail to allow the defendants to answer and thus me[t] the notice pleading required to survive a Rule 12(b)(6) motion" and "nothing more is required."³² More importantly, the Federal Circuit noted that Form 18 put the defendant on enough notice and was therefore consistent with the notice pleading standard: "It logically follows that a patentee need only plead facts sufficient to place the alleged infringer on notice as to what he must defend."³³ In doing so, the majority implied that direct patent infringement pleading does not have to comply with the *Twombly* plausibility standard.

Judge Dyk, however, took the position that the new plausibility standard pronounced in *Twombly* applies to patent infringement pleadings and that Form 18 is inconsistent with *Twombly*.³⁴ In his dissenting opinion, Judge Dyk argued that Form 18 could not pass the plausibility test for failure to state a patent infringement claim because of the lack of specificity it requires with respect to the infringing activity, and that both the patent claims being asserted failed to state a claim despite their compliance with Form 18.³⁵ On the other hand, Judge Dyk agreed that Rule 84, which endorses the sufficiency of Form 18, prevents the court from announcing that

⁽citing Fed. R. Civ. P. Form 16 (2006) (renumbered Fed. R. Civ. P. Form 18)).

²⁸ Fed. R. Civ. P. 84.

Adam Steinmetz, Pleading Patent Infringement: Applying the Standard Established by Twombly and Iqbal to the Patent Context, 13 COLUM. SCI. & TECH. L. REV. 482, 488 (2012).

³⁰ McZeal v. Sprint Nextel Corp., 501 F.3d 1354 (Fed. Cir. 2007).

³¹ *Id.* at 1335, 1354-55.

³² *Id.* at 1357 (citation omitted).

³³ *Id.* (citing Twombly, 550 U.S. at 1971 n.10).

³⁴ *Id.* at 1360, 1362 (Dyk, J., dissenting in part).

³⁵ *Id.* at 1360-61.

Form 18 is insufficient in view of the new plausibility standard.³⁶ Consequently, he called for the rulemaking process to either "eliminat[e] the form, or at least . . . revis[e] it to require allegations specifying . . . the features of the accused device that correspond to the claim limitations."³⁷

3. Sharp divisions in district courts after McZeal

After *McZeal*, district courts were sharply divided on the continued sufficiency of Form 18 in view of *Twombly* and *Iqbal*. On the one hand, some district courts distinguished *McZeal* on the ground that *McZeal* involved a *pro se* plaintiff and therefore a lower pleading standard was applied there.³⁸ Some other courts took the position that the Supreme Court's later decision in *Iqbal* abrogated *McZeal*, which was decided before *Iqbal*.³⁹ Yet some other district courts went a step further to expressly decline to follow *McZeal* and Form 18, reasoning that *Twombly* and *Iqbal* practically invalidated Form 18, and that even a *pro se* plaintiff cannot rely on it.⁴⁰

On the other hand, some district courts followed *McZeal* and held that allegations conforming to Form 18 are sufficient for pleading purposes.⁴¹ These courts noted the difficulty of applying the plausibility standard because it creates a "context-specific task that requires the reviewing court to draw on its judicial experience and common sense,"⁴² but the "line between facts and legal conclusions is not always easy to draw."⁴³

4. Federal Circuit's official endorsement of Form 18

The Federal Circuit attempted to resolve the non-uniformity on the sufficiency of Form 18 in R+L Carriers, where the court, relying heavily on Rule 84, 44 official-

³⁶ *McZeal*, 501 F.3d at 1360.

³⁷ *Id*.

³⁸ See, e.g., Bender v. LG Electronics. U.S.A., Inc., No. C 09-02114 JF (PVT), 2010 WL 889541, at *2, *3 n.3, *6 (N.D. Cal. Mar. 11, 2010) (ruling that to put accused infringers on notice, a patentee must specifically identify an allegedly infringing product, such as "by name or number," and plead factual allegations to plausibly show infringement).

³⁹ See, e.g., Koninklijke Philips Elecs. N.V. v. The ADS Group, 694 F. Supp. 2d 246, 252 n.8 (S.D.N.Y. 2010) ("Of greater relevance, McZeal was decided before the Iqbal decision made clear that Twombly's heightened pleading standard applied in all cases, not merely those like Twombly that assert antitrust violations.").

⁴⁰ See, e.g., Rovi Corp. v. Hulu, LLC, No. 11-665, 2012 WL 261982, at *2-3 (D. Del. Jan. 27, 2012); Pieczenik v. Abbott Labs., No. 10-2230, 2011 WL 1045347, at *20, *27 (D.N.J. Mar. 23, 2011), aff'd, 474 F. App'x 766 (Fed. Cir. 2012).

⁴¹ See, e.g., Bedrock Computer Techs., LLC v. Softlayer Techs., Inc., No. 609 CV 269, 2010 WL 5175172, at *2 (E.D. Tex. Mar. 29, 2010) ("Twombly and Iqbal have not affected the adequacy of complying with Form 18."); Microsoft Corp. v. Phoenix Solutions, Inc., 741 F. Supp. 2d 1156, 1158, 1159 (C.D. Cal. 2010) (finding Form 18 sufficient).

Elan Microelectronics Corp. v. Apple, Inc., No. C 09-01531 RS, 2009 WL 2972374, at *1 (N.D. Cal. Sept. 14, 2009) (quoting Ashcroft v. Iqbal, 556 U.S. 662, 679 (2009)).

⁴³ *Id.* at *2.

⁴⁴ Fed. R. Civ. P. 84; *supra* note 28 and accompanying text; Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007).

ly announced that Form 18 was sufficient under the *Twombly/Iqbal* plausibility standard.⁴⁵ Despite the potential inconsistency between Form 18 and *Twombly/Iqbal*, the Federal Circuit declined to rewrite the text of Form 18 because it felt that such an act would encroach on congressional authority,⁴⁶ and that any changes "must be obtained by the process of amending the Federal Rules, and not by judicial interpretation."⁴⁷ However, the court limited Form 18's application to direct patent infringement pleading only, because Form 18 does not include information about the mens rea required to prove indirect patent infringement.⁴⁸ Therefore, the pleading of indirect patent infringement should comply with the *Twombly/Iqbal* plausibility standard.⁴⁹

Unlike the majority's reliance on Rule 84, Judge Newman, in her dissenting opinion, focused instead on the fundamental purpose of the Federal Rules—to "provide a uniform procedure for all civil actions." Judge Newman argued that since Rule 8 was designed to "establish uniform rules" for all civil cases, except those subject to Rule 9, there should be no special treatment for direct patent infringement pleading just because there is an illustrative form. Because the Supreme Court extended the *Twombly* plausibility standard to all civil actions in *Iqbal*, rather than limiting it to antitrust cases for the same reason of uniformity, Judge Newman thought the majority's approach "absolve[d] patent infringement pleadings from the uniform requirements of the Federal Rules and Supreme Court precedent," and made useless the "judicial experience and common sense" of district courts.

Despite Judge Newman's vigorous dissent in *R+L Carriers* that *Twombly/Iqbal* carved out no exception for pleading of direct patent infringement, the Federal Circuit reaffirmed its endorsement of Form 18 one year later in *K-Tech Telecommunications, Inc. v. Time Warner Cable, Inc.*, where the court again immunized a Form 18-like complaint for direct patent pleading from Rule 12(b)(6) attack.⁵⁴

⁴⁵ R+L Carriers, Inc. v. DriverTech LLC (In re Bill of Lading Transmission & Processing Sys. Patent Litig.), 681 F.3d 1323, 1334-36 (Fed. Cir. 2012).

⁴⁶ *Id.* at 1335 n.7.

⁴⁷ Id. at 1334 (quoting Leatherman v. Tarrant Cnty. Narcotics Intelligence & Coordination Unit, 507 U.S. 163, 168 (1993)).

⁴⁸ See id. at 1336 ("The Forms are controlling only for causes of action for which there are sample pleadings.").

⁴⁹ *Id.* at 1337.

⁵⁰ *Id.* at 1348.

⁵¹ *Id.* at 1349-50.

Ashcroft v. Iqbal, 556 U.S. 662, 684 (2009) (noting that *Twombly* was based on the interpretation and application of Rule 8).

⁵³ In re *Bill of Lading*, 681 F.3d at 1347.

⁵⁴ K-Tech Telecommc'ns., Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1283-87 (Fed. Cir. 2013).

C. Choice of law issues and district courts' continued challenges of Form 18

Despite the Federal Circuit's repeated attempts to resolve the district courts' divided views on the sufficiency of Form 18 in *R+L Carriers* and *K-Tech Telecommunications*, some rebellious district courts continued to hold that Form 18 is insufficient under the *Twombly/Iqbal* standard.⁵⁵ These district courts were able to do so because the Federal Circuit's decisions on procedural issues are not necessarily binding for district courts.⁵⁶ While the Federal Circuit has exclusive jurisdiction over all cases arising under the Patent Act,⁵⁷ pleading is a procedural issue that arises under the Federal Rules of Procedure rather than the Patent Act. Therefore, "[t]he Federal Circuit applies its own law with respect to issues of substantive patent law and certain procedural issues pertaining to patent law, but applies the law of the regional circuits on non-patent issues." Consequently, the Federal Circuit's rulings on the sufficiency of Form 18 in *R+L Carriers*, which applied Sixth Circuit law, and in *K-Tech Telecommunications*, which applied Ninth Circuit law, do not prevent district courts in other circuits from finding that Form 18 is insufficient under *Twombly* and *Iqbal*.

The first example was the Eastern District of Virginia in Macronix, decided in March 2014.⁵⁹ In *Macronix*, District Judge Payne criticized the Federal Circuit's endorsement of Form 18 in McZeal and R+L Carriers, stating that the Federal Court's rulings "simply exempted [direct patent infringement] cases from the reach of Twombly and Iqbal as if a rule change were necessary to implement a Supreme Court decision addressing application of a rule of procedure."60 The district court further criticized the Federal Circuit's reliance on Rule 84, noting that "Rule 84 has been in effect since 1937"61 and has lost its value in view of Twombly and Igbal. The district court further reasoned that "[p]atent cases fit the same bill" as antitrust cases in Twombly, which is "a kind of litigation well-known for extensive discovery and high litigation costs," and patent cases are "perhaps even more so."62 Therefore, "[i]t is not logical to exempt them from the reach of Twombly and Iabal, whose prime purpose was to assure that such expense was not incurred unless the plaintiff had posited a plausible claim in the complaint."63 Consequently, the district court held that a complaint complying with Form 18 is insufficient under the Twombly/ *Iqbal* plausibility standard.⁶⁴

⁵⁵ See, e.g., Macronix Int'l Co. v. Spansion Inc., 4 F. Supp. 3d 797, 802 (E.D. Va. Mar. 10, 2014); Regeneron Pharm., Inc. v. Merus B.V., No. 14–CV–1650 (KBF), 2014 WL 2795461, at *2-*3 (S.D.N.Y. June 19, 2014).

⁵⁶ See Regeneron Pharm., 2014 WL 2795461, at *1.

⁵⁷ 28 U.S.C. § 1295, 1338 (2006).

⁵⁸ Invitrogen Corp. v. Biocrest Mfg., L.P., 424 F.3d 1374, 1378-79 (Fed. Cir. 2005).

⁵⁹ *Macronix*, 4 F. Supp. 3d at 802.

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² *Id.* at 803.

⁶³ Id

⁶⁴ *Id.* at 803-04.

Shortly after *Macronix*, several district courts followed the Eastern District of Virginia and held that Form 18 does not meet the *Twombly/Iqbal* plausibility standard, 65 while other district courts held on to the Federal Circuit's ruling and continued to honor Form 18.66

III. The Divided Patent Pleading Atandards After R+L Carriers

Because of the Federal Circuit's special treatment of pleading direct patent infringement based on Form 18, we are left with different pleading standards for various types of patent infringement actions after R+L Carriers and K-Tech Telecommunications. This section summarizes the various pleading standards in different contexts of patent infringement.

A. Direct infringement

As discussed above, the Federal Circuit has taken the position that Form 18 (which, as noted by Judge Dyk in McZeal and Judge Newman in R+L Carriers, on its face includes nothing more than legal allegations) is sufficient to put the defendants on "fair notice," even in view of Twombly and Iqbal.⁶⁷ Further, the Federal Circuit has also indicated that providing even less specific information than is detailed in Form 18 may still sometimes suffice to defeat a Rule 12(b)(6) motion to dismiss. For example, Form 18 states that the defendant is directly infringing by making, selling, and using a specific device (an electric motor). However, the Federal Circuit does not read Form 18 to require a plaintiff to identify an accused device by name. The court's reasoning is that such a requirement might serve to defeat a claim when the defendant operated in secrecy or when the defendant infringed through a system or method rather than by making a "device." Thus, when the plaintiff cannot identify a specific "device," the complaint may suffice by providing "notice and facial plausibility" of the allegations, which is "not an extraordinarily high [bar]."

See, e.g., Regeneron Pharm., Inc. v. Merus B.V., No. 14-CV-1650 (KBF), 2014 WL 2795461, at *2-*3 (S.D.N.Y. Jun. 18, 2014); Deerpoint Grp., Inc. v. Acqua Concepts, Inc., No. 1:14–CV–01503–SAB, 2014 WL 7178210, at *3 (E.D. Cal. Dec. 16, 2014).

⁶⁶ See, e.g., JDS Uniphase Corp. v. Coadna Photonics, Inc., No. 14–CV–01091–JST, 2014 WL 2918544 at *2-*3 (N.D. Cal. June 26, 2014); Ingeniador, LLC v. Lord's Co. of Orlando, Civ. No. 13–1655(SCC), 2014 WL 5460635, at *3, *4 n.5 (D.P.R. Oct. 24, 2014).

⁶⁷ See generally McZeal v. Sprint Nextel Corp., 501 F.3d. 1354, 1361 (Fed. Cir. 2007); R+L Carriers, Inc. v. DriverTech LLC (*In re* Bill of Lading Transmission & Processing Sys. Patent Litig.), 681 F.3d 1323, 1348 (Fed. Cir. 2012); K-Tech Telecommc'ns., Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1283 (Fed. Cir. 2013).

⁶⁸ Fed. R. Civ. P. Form 18.

⁶⁹ K-Tech Telecommc'ns., 714 F.3d at 1286.

⁷⁰ *Id*.

⁷¹ *Id*.

The majority of district courts have followed the Federal Circuit's approach. Therefore, in these district courts, a complaint for direct patent infringement complying with Form 18, or even complaints including less information as required by Form 18, will stand against Rule 12(b)(6) attacks. On the other hand, several district courts, such as the Eastern District of Virginia, have refused to recognize the continued sufficiency of Form 18 under the *Twombly* and *Iqbal* standard, are reasoning that "[t]here is no logical reason to exempt patent complaints from the plausibility requirements that apply to all other federal complaints. The Consequently, in these district courts, a complaint must plead more than what Form 18 requires and assert enough factual allegations to state a claim to relief that is plausible on its face.

B. Indirect infringement

There are two types of indirect infringement: induced infringement and contributory infringement. He cause both induced infringement and contributory infringement require the infringer to have knowledge of the asserted patent and to possess certain intent, he form 18 requires no such information, the Federal Circuit has ruled that Form 18 does not apply to indirect infringement cases, but only to direct patent infringement cases. Therefore, a complaint pleading induced or contributory infringement must meet the *Twombly/Iqbal* plausibility standard.

Form 18 still plays a role in pleading indirect infringement though. Because a defendant's liability for indirect infringement of a patent requires direct infringement by a third party, ⁷⁹ a plaintiff's plausible claim of the defendant's indirect infringement necessarily requires pleadings of direct infringement by a third party, but only in a level of detail that meets Form 18. However, the Federal Circuit does not require a plaintiff to "identify a specific direct infringer if it pleads facts suffi-

⁷² See, e.g., Light Transformation Techs. LLC v. Light Sci. Grp. Corp., No. 2:12–CV–826–MHS–RSP, 2014 WL 935354, at *2 (E.D. Tex. Mar. 5, 2014); Affinity Labs of Tex., LLC v. Toyota Motor North America, Inc., No. W:13–CV–365, 2014 WL 2892285, at *3 (W.D. Tex. May 12, 2014); Boundaries Solutions Inc. v. CoreLogic, Inc., No. 5:14-CV-00761-PSG, 2014 WL 4954017, at *3 (N.D. Cal. Sept. 29, 2014); Unilin Beheer B.V. v. Tropical Flooring, CV 14–02209 BRO (SSX), 2014 WL 2795360, at *2-3 (C.D. Cal. June 13, 2014); Versata Software Inc. v. Cloud9 Analytics, Inc., Civ. No. 12–925–LPS, 2014 WL 631517, at *3 (D. Del. Feb. 18, 2014); Zond, LLC v. Toshiba Corp., No. 13–CV–11581–DJC, 2014 WL 4056024, at *2-3 (D. Mass. Aug. 14, 2014); Smartwater, Ltd. v. Applied DNA Scis., Inc., No. 12–CV–5731 (JS)(AKT) 2013 WL 5440599, at *3-4 (E.D.N.Y. Sept. 27, 2013); Ziemba v. Incipio Techs., Inc., No. 13–5590 (JLL), 2014 WL 7051782, at *2, 4 (D.N.J. Dec. 12, 2014).

See, e.g., Macronix Int'l Co. v. Spansion Inc., 4 F. Supp. 3d 797, 803-80404 (E.D. Va. Mar. 10, 2014); Regeneron Pharm., Inc. v. Merus B.V., No. 14–CV–1650 (KBF), 2014 WL 2795461, at *2 (S.D.N.Y. June 19, 2014); Deerpoint Grp., Inc. v. Acqua Concepts, Inc., No. 1:14–CV–01503–SAB, 2014 WL 7178210, at *3 (E.D. Cal. Dec. 16, 2014).

⁷⁴ Macronix Int'l Co. v. Spansion Inc., 4 F. Supp. 3d 797, 803-04 (E.D. Va. 2014).

⁷⁵ Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007).

⁷⁶ 35 U.S.C. § 271(b)-(c) (2003).

⁷⁷ Ia

⁷⁸ *In re* Bill of Lading, 681 F.3d at 1334.

⁷⁹ *Id.* at 1333.

cient to allow an inference that at least one direct infringer exists."80

1. Induced infringement

A defendant is liable for induced infringement of a patent when it actively and knowingly aided or abetted a third party to directly infringe the asserted patent, with knowledge of the asserted patent and with knowledge that "the induced acts constitute patent infringement." Under the *Twombly/Iqbal* standard, a complaint for induced infringement must assert enough factual allegations to plausibly show that the defendant (1) induced a third party to directly infringe the asserted patent, (2) had knowledge of the asserted patent, and (3) possessed specific intent to encourage the third party's infringement, knowing that his action would induce actual infringement by the third party.⁸²

District courts have split opinions on what is required for a plaintiff to plead that the accused infringer had knowledge of the asserted patent.⁸³ In a majority of district courts, a plaintiff can simply plead that the accused infringer has knowledge of the asserted patent by filing of the complaint.⁸⁴ In other courts, however, the complaint must assert facts showing that the accused infringer had knowledge of the asserted patent *before* the plaintiff's filing of the complaint.⁸⁵

Whether the accused infringer possessed the specific intent to induce the direct infringement by a third party is a fact-specific question. Both the Federal Circuit and some lower courts have allowed for generous inferences in finding specific intent for induced infringement. For example, the Federal Circuit held that a plaintiff adequately pled specific intent by providing factual allegations that the defendants (1) issued advertising statements relating to their products' ability to operate in a manner similar to the claimed method and (2) hosted seminars targeting existing and potential customers to demonstrate how its products could be used. Similarly, a Delaware court ruled that a plaintiff sufficiently pled specific intent of inducement when it: "(1) provided the defendant with written notice that certain accused products infringed the patent-in-suit; (2) identified the general group of direct infringers who were asserted to have infringed the patent; and (3) set out facts explaining how

⁸⁰ Id. at 1336,

Commil USA, LLC v. Cisco Systems, Inc., 575 U.S. ____ (2015) (slip op., at 5) (quoting Global-Tech Appliances, Inc. v. SEB S.A., 563 U.S. ___ (2011) (slip op., at 10))

⁸² DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1303-05 (Fed. Cir. 2006); In re Bill of Lading, 681 F.3d at 1333, 1339.

M. Andrew Holtman, et al., Avoiding Dismissal in Patent Infringement Cases: An Update On The Twombly /Iqbal Pleading Standard, 26 No. 5 INTELL. PROP. & TECH. L.J. 10, 11 (2014) (citing Rembrandt Social Media, LP v. Facebook, Inc., 950 F. Supp. 2d 876, 881-82 (E.D. Va. 2013)).

⁸⁴ *Id*

⁸⁵ Id. at 12; see also Proxyconn Inc. v. Microsoft Corp., No. SACV 11-1681, DOC (ANx), 2012 WL 1835680, at *5-6 (C.D. Cal. May 16, 2012) (holding that knowledge after filing of a complaint is insufficient for pleading knowledge for indirect infringement).

⁸⁶ In re *Bill of Lading*, 681 F.3d at 1341-46.

the defendant was alleged thereafter to have interacted with those direct infringers in a way that would prompt the reasonable inference that [the] defendant encouraged the direct infringer to continue to infringe the patent."87

2. Contributory infringement

Contributory infringement is limited to sales or importation of components or materials without substantial non-infringing uses. A defendant is liable for contributory infringement when (1) it contributed to a third party's direct infringement; (2) it had knowledge of the asserted patent; (3) the component has no substantial non-infringing uses and is a material part of the invention. The accused infringer's required knowledge of the asserted patent is similar to that for induced infringement as discussed above.

To sufficiently plead the third element (no substantial non-infringing uses and material part), the complaint must provide factual allegations linking the asserted patent with use of the accused product. This is a very context-specific task that usually requires the court to make inferences based on the allegations. For example, the Northern District of California found that the complaint must contain allegations from which the court can infer that the accused product had no substantial non-infringing uses, and noted that this inference is possible only if the complaint explains how the accused product relates to the asserted patent.⁹⁰

C. Willful infringement

Although a finding of willful infringement will impose punitive damages on a defendant, willfulness is not considered as fraud. Therefore, "the pleading requirement for willful infringement does not rise to the stringent standard required by Rule 9(b)." The majority of district courts have held that pleading willful infringement must meet the *Twombly/Iqbal* plausibility standard. Dead willful infringement, a plaintiff must plausibly show that the accused infringer possessed knowledge of both (1) the asserted patent, and (2) that his actions directly or indirectly infringed the asserted patent.

Advanced Optical Tracking, LLC v. Koninklijke Philips N.V., Civ. No. 12–1292–LPS–CJB, 2013 WL 4786463, at *4 (D. Del. Sept. 9, 2013).

^{88 35} U.S.C. § 271(c) (2003).

⁸⁹ Fujitsu Ltd. v. Netgear Inc., 620 F.3d 1321, 1326 (Fed. Cir. 2010).

Redd Group, LLC v. Glass Guru Franchise Sys., Inc., No. 12-CV-04070, 2013 WL 3462078, at *5 (N.D. Cal. July 8, 2013).

⁹¹ 35 U.S.C. § 284 (2003) (providing that "the court may increase the damages up to three times the amount found or assessed" if the defendant is found to have willfully infringed the asserted patent).

Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys., LLC, 350 F.3d 1327, 1343 (Fed. Cir. 2003).

⁹³ Holtman, *supra* note 83, at 14 (citing FuzzySharp Techs. Inc. v. Nvidia Corp., No. 12-CV-06375, 2013 WL 4766877, at *2 (N.D. Cal. Sept. 4, 2013)).

⁹⁴ In re Seagate Tech., LLC, 497 F.3d 1360, 1374 (Fed. Cir. 2007).

With respect to knowledge of the asserted patent, the Federal Circuit held in *In re Seagate Technology* that "a willfulness claim asserted in the original complaint must necessarily be grounded exclusively in the accused infringer's pre-filing conduct." Thus, to plead willfulness, a plaintiff generally should provide some evidence that the defendant had pre-suit knowledge of the asserted patent.

With respect to knowledge of infringement, the Federal Circuit ruled in *Seagate* that an infringer must have acted "despite an objectively high likelihood that its actions constituted infringement of a valid patent." However, lower courts are divided as to whether this must be alleged in a pleading for willfulness. Some district courts have found that this is not required in a pleading for willful infringement. Other courts require more in a pleading for willfulness: the complaint must, at the minimum, include facts "giving rise to at least a showing of objective recklessness of the infringement risk." Still other courts have taken a middle ground, holding that *Seagate*'s "objective recklessness" standard "is not controlling for purposes of pleading [willfulness] under Fed. R. Civ. P. 8(a)," and that a "plaintiff must provide a pleading equivalent to 'with knowledge of the patent and his infringement." 100

IV. The Race Between Congress and the Judiciary

Form 18 and Rule 84 have caused much trouble after *Twombly* and *Iqbal* in patent infringement cases. This was, to some extent, further complicated by the Federal Circuit's ruling in *In re Bill of Lading* and the line of cases following it, which essentially carve out a special treatment for pleading direct patent infringement. As has been discussed above, the Federal Circuit's rulings have stirred much criticism from the dissenters in the Federal Circuit, the lower courts, and commentators. ¹⁰¹ For example, as early as 2007, Judge Dyk, in his dissenting opinion in *McZeal*, pointed out the inconsistency between Form 18 and the new *Twombly* plausibility standard and noted: "One can only hope that the rulemaking process will eventually result in eliminating the form, or at least in revising it to require allegations specifying which claims are infringed, and the features of the accused device that correspond to the claim limitations." ¹⁰² However, five years later, the Federal Circuit had

⁹⁵ In re *Seagate*, 497 F.3d at 1374.

⁹⁶ *Id.* at 1371.

⁹⁷ Holtman, *supra* note 83, at 14.

⁹⁸ Va. Innovation Sci., Inc. v. Samsung Elecs. Co., No. 2:12CV548, 2013 WL 6053846, at *4-5 (E.D. Va. Nov. 15, 2013).

⁹⁹ See, e.g., Hand Held Prods., Inc. v. Amazon.com, Inc., No. 12-CV-00768, 2013 WL 507149, at *7 (D. Del. Feb. 6, 2013) (quoting St. Clair Intellectual Prop. Consultants, Inc. v. Hewlett–Packard Co., No. 10–425–LPS, 2012 WL 1134318, at *2–3 (Del. Mar.28, 2012); Execware, LLC v. Staples, Inc., No. 11-836, 2012 WL 6138340, at *6 (D. Del. Dec. 10, 2012).

Milwaukee Elec. Tool Corp. v. Hitachi Koki, Ltd., No. 09-C-948, 2011 WL 665439, at *3-5 (E.D. Wis. Feb. 14, 2011) (internal citation omitted).

See, e.g., In re Bill of Lading, 681 F.3d 1323 (Fed. Cir. 2012) (J. Newman, dissenting); Macronix,
4 F. Supp. 3d 797 (E.D. Va. Mar. 10, 2014); see also Moore, supra note 3, at 451.

¹⁰² McZeal v. Sprint Nextel Corp., 501 F.3d 1354, 1360 (Fed. Cir. 2007) (Dyk, J., dissenting).

made it clear in *In re Bill of Lading* that it will not revise the content of Form 18, although it recognized the inconsistency between Form 18 and *Twombly/Iqbal* standard, explaining that revising the form is within Congress's exclusive power. ¹⁰³ Consequently, the lower courts and patent litigants can only hope that the rulemaking process will step in and fix the problem. Fortunately, both Congress and the judiciary have attempted to address this troubling issue.

A. Patent reforms in the Congress

In the recently concluded 113th Congress, at least fourteen patent reform bills were introduced and three of these bills (the Innovation Act, the Patent Abuse Reduction Act, and the Patent Litigation and Innovation Act¹⁰⁴) would have imposed a higher patent pleading standard. Although none of these bills became law, the Innovation Act did pass the House of Representatives in December 2013, and it was reintroduced in the 114th Congress on February 5, 2015. In addition, a new bill introduced in the 114th Congress on March 3, 2015, the STRONG Patents Act of 2015, also calls for the elimination of Form 18.

The Innovation Act, the Patent Abuse Reduction Act, and the Patent Litigation and Innovation Act all require long lists of information to be pleaded in the complaint. For example, Section 3(a) of the Innovation Act requires a plaintiff to plead, "unless the information is not reasonably accessible to such party," the following information in the complaint: (1) "an identification of each claim;" (2) "an identification of each accused process, machine, manufacture, or composition of matter (referred to in this section as an 'accused instrumentality') alleged to infringe the claim;" (3) "for each accused instrumentality . . . an identification with particularity... of ... the name or model number ... or ... a description of each accused instrumentality;" and (4) "for each accused instrumentality . . ., a clear and concise statement of-where each element of each claim . . . is found within the accused instrumentality; and with detailed specificity, how each limitation of each claim . . . is met by the accused instrumentality." 109 Both the Patent Abuse Reduction Act, and the Patent Litigation and Innovation Act also require a similar specific list of information that must be pleaded. 110 In contrast, the STRONG Patents Act does not impose any of these requirements.

These bills also expressly addressed the continued sufficiency of Form 18. The

¹⁰³ In re *Bill of Lading*, 681 F.3d at 1334-35.

¹⁰⁴ Innovation Act, H.R. 3309, 113th Cong. (2013); Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong.; Patent Abuse Reduction Act, S. 1013, 113th Cong. (2013).

¹⁰⁵ See Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. Rev. 279, 284 (2015).

¹⁰⁶ See Innovation Act, H.R. 3309, 113th Cong. (2013).

¹⁰⁷ Innovation Act, H.R. 9, 114th Cong. (2015).

¹⁰⁸ See STRONG Patents Act of 2015, S. 632, 114th Cong.

¹⁰⁹ Innovation Act § 3(a), H.R. 9, 114th Cong. § 3(a) (2015) (emphasis added).

¹¹⁰ See Patent Abuse Reduction Act, S. 1013, 113th Cong. § 2(a) (2013); Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong. §2(a).

Innovation Act and the STRONG Patents Act explicitly instruct the Supreme Court to eliminate Form 18 from the Appendix of the Federal Rules of Civil Procedure. On the other hand, the Patent Abuse Reduction Act and the Patent Litigation and Innovation Act were less direct, only requiring the Court to "review and amend" Form 18 "to ensure that Form 18 is consistent with" the new pleading requirements adopted in the bill. 112

B. The judiciary's move to abrogate Rule 84 and Form 18

Perhaps in response to the Federal Circuit's invitations and district courts' divided opinions on the continued sufficiency of Form 18, the Judicial Conference Committee on Rules of Practice and Procedure started to evaluate the possibility of revising Rule 84 and the forms in the Appendix of Federal Rules of Civil Procedure.

As early as August 2013, a lengthy package of proposed amendments including proposals to abrogate Rule 84 and Form 18 were released. In September 2014, the 26-member Judicial Conference Committee voted for the proposed amendments and "unanimously approved . . . a proposed abrogation of Rule 84 and the Appendix of Forms." It

It is worth noting the Judiciary Conference Committee's rationales for proposing the abrogation of Rule 84 and Appendix of Forms. First, the Committee noted that "Rule 84 and the Appendix of Forms are no longer necessary." This is because "Rule 84 was adopted when the Civil Rules were established in 1938 'to indicate, subject to the provisions of these rules, the simplicity and brevity of statement which the rules contemplate," and "[t]he purpose of providing illustrations for the rules . . . has been fulfilled" given that nowadays "there are many excellent alternative sources for forms, including the Administrative Office of the United States Courts." ¹¹⁶

Second, the Committee noted that "[m]any of the forms are out of date." Most of the Appendix Forms were adopted in 1938 when the Civil Rules were established, and "[t]he sample complaints, for example . . . illustrate a simplicity of pleading that has not been used in many years." 118

¹¹¹ Innovation Act § 6(c)(1); accord STRONG Patents Act of 2015 § 106.

¹¹² Patent Abuse Reduction Act § (2)(c); accord Patent Litigation and Innovation Act §2(c).

Vin Gurrieri, Judges Vote To Nix Rule Creating Patent Complaint Forms, (Sept. 17, 2014, 5:50 PM ET), available at http://www.law360.com/articles/578149

Summary of the Report of the Judicial Conference Committee on Rules of Practice and Procedure, at Rules-13 (Sept. 2014), available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Reports/ST09-2014.pdf.

¹¹⁵ Id. at Appendix B-69.

¹¹⁶ *Id*.

¹¹⁷ Id. at Appendix B-19.

¹¹⁸ *Id*.

Third, the Committee noted that "[a]mendment of the civil forms is cumbersome," which requires "[a] process [that] ordinarily takes at least three years." To amend the forms, the "amendments proposed by the Committee must be approved by the Standing Committee, the Judicial Conference, the Supreme Court, and Congress. Public notice and comment are also required." Therefore, the better approach is to simply abrogate Rule 84 and the Appendix Forms rather than amending them.

The Committee's final argument was that "the Committee's perception was that the forms are rarely used." In response to public comments arguing that "the forms assist pro se litigants and new lawyers," the Committee noted that "only one [of those commentators] stated that the writer had ever actually used the forms. The general lack of response to the Rule 84 proposal reinforced the Committee's view that the forms are seldom used." It is interesting how the Committee reached its conclusion that the Appendix Forms are rarely used, given that there are abundant cases in the district courts and the Federal Circuit addressing the sufficiency of Form 18. 123

On April 29, 2015, the Supreme Court adopted the Judiciary Conference's proposals and submitted it to Congress for final review and approval. ¹²⁴ The new rule became effective on December 1, 2015in absence of Congress's objection. ¹²⁵

C. Congress should allow courts to experiment with the *Twombly/Iqbal* plausibility pleading standard

Although there are several pending bills, such as the Innovation Act, that call for a heightened pleading standard for patent infringement actions, Congress should afford courts the opportunity to at least experiment with the *Twombly/Iqbal* plausibility pleading standard, instead of adopting the pleading "with detailed specificity" standard proposed by the Innovation Act. First, having a special pleading with detailed specificity standard for direct infringement pleading would once again bring direct patent infringement pleading out of line with other types of patent infringement pleadings and other types of civil pleadings, just like Form 18 did. This would go against the general rule of *Iqbal*'s spirit of treating all pleadings for civil cases with uniformity, ¹²⁶ which is another reason why Form 18 should be abandoned.

Second, the Innovation Act's requirement to plead "with particularity" and

¹¹⁹ *Id*.

¹²⁰ *Id*.

¹²¹ *Id*.

¹²² *Id.* at Appendix B-20.

¹²³ See generally supra Sections II and III.

¹²⁴ See Pending Rules Amendments, UsCourts.Gov, http://www.uscourts.gov/rules-policies/pending-rules-amendments (last visited, May 9, 2015).

¹²⁵ 28 U.S.C. § 2074. (2012).

¹²⁶ Ashcroft v. Iqbal, 556 U.S. 662, 684 (2009).

"with detailed specificity" would affect a dramatic leap from the minimal pleading requirements of Form 18 to a new standard that is akin to the requirement of Rule 9(b) that plaintiffs plead fraud "with particularity." In contrast, the *Twombly/Iqbal* plausibility pleading standard only modestly increases the amount of details required for direct patent infringement. There is no compelling reason to heighten the pleading requirement for direct patent infringement to a similar level to pleading fraud, which has its own policy justifications.

Third, the inflexibility of the Innovation Act's pleading with detailed specificity will deprive district court judges of the ability to exercise discretion and make decisions on a case-by-case basis. Under the pleading with detailed specificity standard, some patent holders with legitimate infringement claims would be unable to survive the pleading stage because some patent infringement activities often occur in secret. For example, in the biotechnology industry, a patent holder with a genuine belief that its patent is being infringed often cannot obtain information about its competitor's potentially infringing manufacturing processes without discovery. ¹²⁹ In these cases, a district judge should be given the discretion to allow limited discovery at the motion to dismiss stage so that the patentee would have a chance to discover key facts that were inaccessible to it. ¹³⁰ The *Twombly/Iqbal* standard would grant district judges such discretion.

Fourth, although the Innovation Act may excuse a party from not providing certain detailed facts in the pleading when the relevant information "is not reasonably accessible," this seemingly safe harbor for plaintiffs will likely not lead to an efficient determination on the pleadings. As one commentator pointed out, this standard would require the court to look beyond the pleadings to determine whether the facts absent in the plaintiff's pleading were "reasonably accessible." This may invite additional and unnecessary litigation at the pleading stage and increase the cost of the already extremely expensive patent litigations. Thus, it would be simpler to allow district judges to evaluate the plausibility of the infringement pleadings based on "judicial experience and common sense," as required by *Twombly* and *Iq-bal*. 133

Finally, district courts have already been trying to hash out what should be re-

¹²⁷ See Fed. R. Civ. P. 9(b) ("In alleging fraud or mistake, a party must state with particularity the circumstances constituting fraud or mistake."); see also Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. Rev. 279, 289 (2015).

¹²⁸ See supra, Section IV.B.2.

¹²⁹ See Gugliuzza, supra note 127, at 290.

¹³⁰ See id. at 290, 291, (citing Rice v. Murakami, No. 1:13-CV-441-BLW, 2014 WL 2780977, at *1-2 (D. Idaho June 18, 2014) (finding that the plaintiff's complaint failed to meet the requirements of Iqbal but ordering "limited discovery" to allow the plaintiff "a fair opportunity to amend his complaint to satisfy the Iqbal standards").

¹³¹ *Id.* at 291.

¹³² *Id*.

¹³³ See id.; see also Ashcroft v. Iqbal, 556 U.S. 662, 679 (2009).

quired for pleading patent infringement under the *Twombly/Iqbal* plausibility standard, ¹³⁴ and courts have long been applying the plausibility standard in indirect infringement (inducement and contributory infringement) cases. ¹³⁵ Thus, it would be prudent to at least first see if the *Twombly/Iqbal* standard would solve the problem of overly vague direct infringement pleadings before requiring the much more drastic reform required by the Innovation Act.

V. District Courts' Experiments on Pleading Direct Infringement Under *Twombly* and *Iqbal*

Although it will likely take the lower courts several years to resolve what exactly should be required to plead direct infringement under the *Twombly/Iqbal* plausibility standard, the district courts' decisions after *Twombly* and *Iqbal* have raised three possible requirements for pleading direct infringement under the plausibility standard: whether the plaintiff should be required to (1) specify the particular patent claims that are allegedly infringed, (2) identify the specific allegedly infringing products, or (3) assert a theory of infringement.

A. Specifying the particular patent claims

Historically, a plaintiff must specify in its complaint the particular claims that were allegedly infringed. However, prior to *Twombly*, most courts held that a plaintiff did not have to identify the specific infringed claims in the complaint. These courts generally relied on the notice pleading standard and took the position that the notice function was satisfied without specifying the claims that were allegedly infringed. After *Twombly*, courts are more split over whether the plaintiff should be required to assert the specific allegedly infringed claims in the complaint.

Shortly after *Twombly*, most district courts generally still do not require a plaintiff to identify the specific infringed claims in the complaint.¹³⁹ Some courts based their rulings on the ground that Form 18 continued to be valid under *Twombly* and *Iqbal*, and Form 18 does not require the plaintiff to specify the infringed patent

¹³⁴ See supra, Section IV. See infra, Section V.

¹³⁵ See supra, Section III. B.

¹³⁶ See Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in A Post-Twombly World, 18 Tex. INTELL. PROP. L.J. 451, 480 (2010) (citing, among others, J.D. Ferry Co. v. Macbeth Eng'g Corp., 11 F.R.D. 75, 76 (M.D. Pa. 1951) ("The general practice in patent infringement suits has been to require the plaintiff to state what claims of a patent he alleges to have been infringed.").

See id. (citing, among others, Phonometrics, Inc. v. Hospitality Franchise Sys., Inc., 203 F.3d 790, 794 (Fed. Cir. 2000).

¹³⁸ *Id*.

^{See, e.g., Prism Techs., LLC v. AT&T Mobility, LLC, No. 8:12CV122, 2012 WL 3867971, at *3 (D. Neb. Sept. 6, 2012); Atwater Partners of Tex. LLC v. AT & &T, Inc., No. 2:10–CV–175–TJW, 2011 WL 1004880, at *3 (E.D. Tex. Mar. 18, 2011); Xpoint Techs., Inc. v. Microsoft Corp., 730 F. Supp. 2d 349, 353 (D. Del. 2010); Ardente, Inc. v. Shanley, No. C 07-4479 MHP, 2010 WL 546485, at *5 n.6 (N.D. Cal. Feb. 10, 2010); ASUSTek Computer Inc. v. Ricoh Co., Ltd., No. C 07-01942 MHP, 2007 WL 4190689, at *4 (N.D. Cal. Nov. 21, 2007).}

claims. For example, the Northern District of California found in *Ardente* that the plaintiff's failure to identify the accused patent claims did not render the complaint inadequate, stating that "Form 18... found in the appendix of forms in the Federal Rules of Civil Procedure does not indicate that a party must specify the particular claims thought to have been infringed."¹⁴⁰ Similarly, the District of Nebraska in *Prism Technologies* denied the defendant's argument that the plaintiff's "complaint is inadequate because Prism does not state which of the claims of each patent are allegedly being infringed upon," noting that "Form 18 does not require Prism to identify specific patent claims in its complaint."¹⁴¹ The Eastern District of Texas and the District of Delaware have similarly held that the plaintiff is not required to specify particular claims in the complaint.¹⁴²

On the other hand, more and more district courts have held after *Twombly* that the new plausibility standard requires the plaintiff to identify specific allegedly infringed patent claims in the complaint.¹⁴³ The Western District of Wisconsin in *Taurus* was the first district court after *Twombly* to require identification of allegedly infringed patent claims in the complaint.¹⁴⁴ In requiring the patentee to identify in its complaint which claims of the patent it asserted are infringed, the district court reasoned that the "plaintiff must do more than give clues to meet even the broad Rule 8 notice requirements," and "[i]n the context of alleged patent infringement, [notice] means at least that the plaintiff must tell the defendant which products allegedly infringe the plaintiff's patent."¹⁴⁵ Therefore, the court directed that:

At the very least, a plaintiff's failure to specify which claims it believes are infringed by a defendant's products places an undue burden on the defendant, who must wade through all the claims in a patent and determine which claims might apply to its products to give a complete response. A plaintiff's failure to specify patent claims hinders the defendant's ability to prepare a defense. ¹⁶¹

Based on this rationale, the court granted the defendants' motion for a more definite statement because "defendants cannot respond to plaintiff's allegations without un-

¹⁴⁰ Ardente, 2010 WL 546485, at *5 n.6.

¹⁴¹ Prism Techs., 2012 WL 3867971, at *3.

Atwater, 2011 WL 1004880, at *3 ("[T]here is no requirement that the complaint specify which specific claims the plaintiff is asserting..."); *Xpoint Techs.*, 2010 WL 3187025, 730 F. Supp. 2d at 353 ("A plaintiff is not required to specifically include each element of the asserted patent's claims or even identify which claims it is asserting; nor is it required to describe how the allegedly infringing products work.").

See, e.g., Locata LBS, LLC v. Yellowpages.com, LLC, Nos. LA CV13–07664 JAK (SHx), LA CV13–07748 JAK (SHx), LA CV13–07743 JAK (SHx), LA CV13–07895 JAK (SHx), 2014 WL 2581176, at *4-5 (C.D. Cal. Apr. 18, 2014); Ingeniador, LLC v. Interwoven, 874 F. Supp. 2d 56, 66, 69 (D.P.R. 2012); Tetsuya v. Amazon.com, Inc., No. C11-01210 HRL, 2011 WL 2472557, at *1 (N.D. Cal. June 22, 2011); Tadayon v. Execubus, Inc., No. 3:11CV21311-5909, 2011 WL 7429453, at *1 (E.D. Va. June 15, 2011); Taurus IP, LLC v. Ford Motor Co., 539 F. Supp. 2d 1122, 1127 (W.D. Wis. 2008).

¹⁴⁴ *Taurus*, 539 F. Supp. 2d at 1127.

¹⁴⁵ *Id.* (alterations in original).

due burden and prejudice."146

The Eastern District of Virginia went a step further in *Tadayon*, requiring the plaintiff's complaint and the defendant's counterclaim to set forth "all aspects of each claim that is alleged to be infringed, claim by claim, and identifying the infringing product (by product, by claim) and describe how the infringing product is alleged to offend; and shall not use conclusory language." ¹⁴⁷

Similarly, in its recent decision in *Locata LBS*, the Central District of California found that a complaint failed to meet the *Twombly/Iqbal* plausibility standard where claims of the allegedly infringed patent were not identified, nor was the manner in which the end user's product infringed.¹⁴⁸

B. Identifying the specific allegedly infringing products

Unlike the district courts' divided view over whether the complaint should identify particular patent claims, courts after *Twombly* and *Iqbal* have generally required the plaintiff to identify the infringing products with at least some level of specificity. However, courts have not reached an agreement regarding with what level of specificity the plaintiff should identify the alleged infringing products. ¹⁵⁰

On the one hand, most courts have required only a general description of the alleged infringing products. These courts generally based their rulings on the ground that Form 18 requires only minimal identification of the infringing product, and that the Federal Circuit has read Form 18, in *K-Tech Telecomms*, to not require a plaintiff to identify an accused device by name. ¹⁵¹ For example, in *Innovative Automation*, the Eastern District of Texas found that the plaintiff's identification of infringing products as "Vudu content delivery product and service" with a reference to "the product's own webpage where it is generally described" was sufficient under

¹⁴⁶ *Id*.

¹⁴⁷ Tadayon, 2011 WL 7429453, at *1 (E.D. Va. June 15, 2011).

¹⁴⁸ Locata, 2014 WL 2581176, at *4-5 (C.D. Cal. Apr. 18, 2014).

^{See, e.g., EmeraChem, Holdings, LLC v. Volkswagen Grp. of America, Inc., No. 3:14–CV–132–PLR–HBG, 2014 WL 5795027, at *2-3 (E.D. Tenn. Nov. 6, 2014); Courtesy Prods., L.L.C. v. Hamilton Beach Brands, Inc., No. 13–2012–SLR, 2014 WL 5780877, at *2 (D. Del. Nov. 5, 2014); Innovative Auto. LLC v. Vudu, Inc., No. 2:13–CV–1109–JRG, 2014 WL 4090528, at *2 (E.D. Tex. Aug. 19, 2014); Zond, LLC v. Renesas Electronics Corp., No. 13–11625–NMG, 2014 WL 4161348, at *4 (D. Mass. Aug. 15, 2014); Unilin Beheer B.V. v. Tropical Flooring, No. CV 14–02209 BRO (SSX), 2014 WL 2795360, at *3-4 (C.D. Cal. June 13, 2014); Infineon Techs. AG v. Volterra Semiconductor Corp., No. C–11–6239 MMC, 2012 WL 3939353, at *2-3 (N.D. Cal. Sept. 10, 2012); Prism Techs., LLC v. AT&T Mobility, LLC, No. 8:12CV122, 2012 WL 3867971, at *5 (D. Neb. Sept. 6, 2012); Oakley, Inc. v. 5.11, Inc., No. 11CV2173 WQH (CAB), 2012 WL 1327796, at *3 (S.D. Cal. Apr. 17, 2012).}

¹⁵⁰ See supra note 134.

¹⁵¹ K-Tech Telecommc'ns., Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1286 (Fed. Cir. 2013); see also, e.g., Innovative Automation LLC v. Vudu, Inc., 2:13–CV–1109–JRG, 2014 WL 4090528, at *2 (E.D. Tex. 2014).

the plausibility standard.¹⁵² Similarly, the District of Delaware held in *Courtesy Products* that the accused product was adequately identified with a general description and identification of specific model numbers as an example.¹⁵³ Also, the Western District of Oklahoma held that even though a plaintiff's complaint did not identify a specific accused product, it was sufficient where it alleged the type of products.¹⁵⁴ Further, where the infringed patent claim is a method claim, the Federal Circuit has provided an additional reason to not require the plaintiff to identify accused products by name: when the accused infringers performed the method in secret, the plaintiff needs discovery to confirm its suspicion.¹⁵⁵

On the other hand, some district courts have required more than just a general description of the alleged infringing products and have instead required the plaintiff to identify *specific* accused products.¹⁵⁶ For example, the District of Nebraska found that a plaintiff's identification of the accused products as "various wireless products and data services that implement authentication systems and methods for controlling access to protected computer resources as claimed in the . . . patent" was too broad and vague.¹⁵⁷ Similarly, the Southern District of California ruled in *Oakley* that the plaintiff's identification of the accused product as "eyewear" was insufficient because it "fail[s] to identify any specific products."¹⁵⁸

C. Asserting a theory of infringement

With regard to whether the plaintiff should be required to assert a theory of infringement in its complaint, there is no consensus among the district courts either. The Eastern District of Texas was the first district court that expressly refused to require the plaintiff to assert a theory of infringement in the complaint. ¹⁵⁹ In *Actus*, the district court denied the defendant's invitation to require the plaintiff to "allege with specificity a theory of infringement for each element of the asserted claims," because the claims "have not yet been construed" in a *Markman* hearing, and thus a "motion to dismiss is premature" at this stage. ¹⁶⁰ Consequently, the court proclaimed that "[t]he Court does not require that plaintiffs in a patent infringement

¹⁵² Innovative Automation, 2014 WL 4090528, at *2.

¹⁵³ Courtesy Prods., 2014 WL 5780877, at *2.

Flow Valve, LLC v. Forum Energy Techs., Inc., No. CIV-13-1261-F, 2014 WL 3567814, at *4 (W.D. Okla. July 18, 2014).

¹⁵⁵ K-Tech Telecommc'ns., 714 F.3d at 1286 (Fed. Cir. 2013).

See, e.g., Tadayon, No. 3:11CV213, 2011 WL 7429453, at *1 (E.D. Va. June 15, 2011) (demanding that the plaintiff set forth in its amended complaint "all aspects of each claim that is alleged to be infringed, claim by claim, and identifying the infringing product (by product [sic] by product, by claim) and describe how the infringing product is alleged to offend...").

Prism Techs., LLC v. AT&T Mobility, LLC, No. 8:12CV122, 2012 WL 3867971, at *1, *5 (D. Neb. Sept. 6, 2012).

¹⁵⁸ Oakley, Inc. v. 5.11, Inc., No. 11CV2173 WQH (CAB), 2012 WL 1327796, at *1, *3 (S.D. Cal. Apr. 17, 2012).

Actus, LLC v. Bank of Am. Corp., No. 2–09–CV–102–TJW, 2010 WL 547183, at *2 (E.D. Tex. Feb. 10, 2010).

¹⁶⁰ *Id*.

lawsuit attach fully-developed infringement contentions to its complaint."¹⁶¹ Several other district courts, including the District of Delaware and the Central District of California, have followed the Eastern District of Texas's approach in *Actus*, and refused to require the plaintiff to include a fully-developed infringement theory in the complaint. ¹⁶²

In contrast, other district courts have implicitly required the plaintiff to include some kind of infringement theory in the complaint, by requiring the plaintiff to allege in what manner or means the accused products have infringed the asserted patents. For instance, in *Tadayon*, the Eastern District of Virginia demanded the plaintiff to set forth "all aspects of each claim that is alleged to be infringed, claim by claim, and [to identify] the infringing product (by product by product, by claim) and describe *how the infringing product is alleged to offend*." Similarly, a California court required the plaintiff to amend the complaint to "allege with sufficient particularity: (i) the specific claim(s) of the [asserted patent] that are allegedly infringed by the [accused products]; and (ii) the *manner in which those claims are infringed* by the [accused products]." ¹⁶⁴

VI. Recommendations and Potential Impacts of the Heightened Pleading Standard

This section discusses what level of details should be required in direct patent infringement pleading under the *Twombly/Iqbal* plausibility standard, assuming that Congress will not adopt a more stringent pleading standard such as that proposed in the Innovation Act. This section also discusses some potential impacts of the plausibility pleading standard on several important patent litigation players.

A. What should be required to plead direct patent infringement under *Twombly* and *Iqbal*

After the abrogation of Rule 84 and Form 18, the lower courts need to resolve several issues in the coming years concerning what should be required to plead direct patent infringement under the *Twombly/Iqbal* standard. In this subsection, I propose several approaches for the courts to use in resolving several important issues.

¹⁶¹ *Id*.

See, e.g., Pragmatus AV, LLC v. TangoMe, Inc., No. 11–1092–LPS, 2013 WL 571798, at *5, 7
(D. Del. Feb. 13, 2013); Network Signatures, Inc. v. Nestlé USA, Inc., SACV 11-1614 JVS (RNBx), 2012 U.S. Dist. LEXIS 189681, at *6-7 (C.D. Cal. Apr. 16, 2012); H-W Tech., L.C. v. Apple, Inc., No. 3:11–CV–651–G, 2012 WL 959316, at *7 (N.D. Tex. Feb. 23, 2012).

Tadayon v. Execubus, Inc., No. 3:11CV21311-5909, 2011 WL 7429453, *1 (E.D. Va. 2011) (emphasis added).

Locata LBS, LLC v. Yellowpages.com, LLC, Nos. LA CV13–07664 JAK (SHx), LA CV13–07748 JAK (SHx), LA CV13–07743 JAK (SHx), LA CV13–07895 JAK (SHx), 2014 WL 2581176, at *5 (C.D. Cal. Apr. 18, 2014) (emphasis added).

1. Identification of particular patent claims should be required

In order to give defendants a "fair notice" under the *Twombly/Iqbal* plausibility standard, courts should require a plaintiff to identify specific claims of the patent that were allegedly infringed. As Judge Crabb pointed out in *Taurus IP*, *LLC v. Ford Motor Co.*, "a plaintiff's failure to specify which claims it believes are infringed by a defendant's products places an undue burden on the defendant, who must wade through all the claims in a patent and determine which claims might apply to its products to give a complete response. A plaintiff's failure to specify patent claims hinders the defendant's ability to prepare a defense." Not requiring a plaintiff to identify the specific infringed patent claims is especially troublesome where there are a large number of claims in an asserted patent (some patents include almost 600 claims!). In these cases, a plaintiff's failure to identify specific claims will unfairly prejudice the defendants and frustrate the very purpose of "fair notice" under Rule 8 and the spirit of *Twombly* and *Iqbal*.

2. At least a general identification of infringing products should be required

With regard to how specifically a plaintiff should be required to identify the infringing products in his complaint, courts should resolve the question on a case-by-case basis. Generally, courts should require the plaintiff to identify specific infringing products, by either model numbers or product types. ¹⁶⁷ This requirement is most consistent with the purpose of putting the defendants on "fair notice." Further, such a requirement makes sure that the plaintiff conducts at least some preliminary research of the case before filing the complaint and reduces the chance of frivolous filing sanctions under Rule 11. ¹⁶⁸

To the extent that in some cases it is impossible for the plaintiff to identify the specific infringing products, courts should allow the plaintiff to identify the infringing products with only general descriptions. This scenario arose in *K-Tech Telecomms*. ¹⁶⁹ In that case, the plaintiff alleged that defendant's products infringed the method claims in the asserted patent; however, the plaintiff could not identify the specific infringing products because the defendant performed the method in secret. ¹⁷⁰ Therefore, the Federal Circuit ruled that the plaintiff's general description of the infringing products was adequate in that case. ¹⁷¹ This approach strikes a good balance between giving the defendant a fair notice and at the same time does not unduly prejudice the plaintiff.

¹⁶⁵ Taurus IP, LLC v. Ford Motor Co., 539 F. Supp. 2d 1122, 1127 (W.D. Wis. 2008).

¹⁶⁶ See e.g., Pat. No. U.S. 6,567,473 B1 (filed Mar. 10, 2000) (with 596 claims).

¹⁶⁷ See Prism Techs., LLC v. AT&T Mobility, LLC, No. 8:12CV122, 2012 WL 3867971, *5 (D. Neb. 2012).

¹⁶⁸ Fed. R. Civ. P. 11.

¹⁶⁹ K-Tech Telecommc'ns., Inc. v. Time Warner Cable, Inc., 714 F.3d 1277 (Fed. Cir. 2013).

¹⁷⁰ Id. at 1284-87.

¹⁷¹ *Id*.

3. Assertion of a theory of infringement should be required

Unlike the Eastern District of Texas's approach in *Actus*, *LLC v. Bank of Am. Corp.*, ¹⁷² courts should require a plaintiff to assert a theory of infringement in the complaint, i.e., how the accused products infringed the asserted claims. Admittedly, at the pleading stage, the language of the claims has not been construed through a *Markman* hearing, but a court can nevertheless give the claims' language the broadest reasonable construction only for the purpose of evaluating the plausibility of the plaintiff's pleading. The "broadest reasonable construction" standard not only comports with the USPTO's long-time practice of giving the claims broadest reasonable interpretation in examining the patent, ¹⁷³ but also functions similarly to the "assumption of truth" approach in normal pleading standard.

Some district courts, especially the Eastern District of Texas, have noted that the plaintiff's infringement theory will be disclosed to the defendant in infringement contentions after the filing of complaint, and thus the complaint does not need to include an infringement theory. However, courts usually require the plaintiff to serve the defendant infringement contentions shortly after filing the complaint anyway. Therefore, requiring the plaintiff to either assert the infringement theory in the complaint or supplement the complaint with infringement contentions does not place a great burden on the plaintiff. This requirement, like the requirement to identify specific infringing products in the complaint, forces the plaintiff and its attorney to conduct preliminary research of the case. This will not only reduce the chance of frivolous filing sanctions under Rule 11, the but also forces the plaintiff to evaluate the merits and value of its case, which encourages settlement and thus avoids potential litigation costs.

At least one commentator has raised the concern that by requiring the plaintiff to assert an infringement theory in the complaint, "the court might be limiting the potential arguments that the plaintiff could make if and when the claims are being construed" and "a judge who is ruling on what the claim language means may be inclined to rule based on what the plaintiff asserted in the complaint rather than allowing the plaintiff to subsequently argue for a larger scope." However, the commentator's concern is misplaced. First, district court judges possess the required legal training and judicial experience to separate claim interpretations in different

¹⁷² Actus, LLC v. Bank of Am. Corp., No. 2–09–CV–102–TJW, 2010 WL 547183, at *2 (E.D. Tex. Feb. 10, 2010).

¹⁷³ See M.P.E.P. §2111 (2013); In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004).

See, e.g., Innovative Automation LLC v. Vudu, Inc., No. 2:13–CV–1109–JRG, 2014 WL 4090528,
(E.D. Tex. 2014); Atwater Partners of Texas LLC v. AT & T, Inc., No. 2:10–CV–175–TJW,
2011 WL 1004880, *2-3 (E.D. Tex. 2011).

¹⁷⁵ See, e.g., Patent Rules 3-1 U.S. District Court for the Eastern District of Texas (2005), available at http://www.txed.uscourts.gov/cgi-bin/view_document.cgi?document=1179.

¹⁷⁶ Fed. R. Civ. P. 11.

Adam Steinmetz, Pleading Patent Infringement: Applying the Standard Established by Twombly and Iqbal to the Patent Context, 13 COLUM. SCI. & TECH. L. REV., 482, 505-06 (2012).

stages of the litigation. Further, as noted above, in many district courts, the plaintiff is required to disclose its infringement theory when serving the infringement contentions shortly after filing the complaint anyway, which is also usually before the claim construction in a *Markman* hearing proceeding. Thus, requiring the plaintiff to disclose an infringement theory in the complaint rather than waiting to disclose it in the infringement contentions does not make a significant difference in limiting the plaintiff's arguments or causing bias on the part of the district judges.

4. Amendment of complaint under Rule 15(a) should be liberally granted

The above recommended approach requires the plaintiff to identify specific infringed patent claims, specific infringing products, and to assert a theory of infringement in the complaint, but all these disclosures would take place before discovery, before the plaintiff has a chance to obtain the full scope of necessary information. One question that naturally arises from this approach is how closely should the plaintiff be tied to its allegations in the complaint?

One possible approach to resolve the issue is to employ Rule 15, which allows the court to grant leave to the plaintiff to amend its complaint.¹⁷⁸ To compensate for the plaintiff's lack of information in the pleading stage, courts should liberally grant the plaintiff's Rule 15(a) motion to amend the complaint when discovery of new evidence warrants the amendment. However, courts should also be cautious of potential abuse of Rule 15(a) by the plaintiff, i.e., the possibility that the plaintiff purposefully asserts one set of allegations in the original complaint to mislead the defendant and then files a Rule 15(a) motion to amend the complaints asserting another set of allegations that it intended. Obviously, such abuse of Rule 15(a) motion will defeat the purpose of "fair notice" pleading and prejudice the defendant.

5. Choice of law on procedural issues in patent cases

As noted in Section II.C above, the Federal Circuit applies its own law with respect to issues of substantive patent law and certain procedural issues pertaining to patent law, but applies the law of the regional circuits on non-patent issues. This choice of law rule has caused non-uniform results in the district courts. For example, after the Federal Circuit's official endorsement of the sufficiency of Form 18 in view of *Twombly* and *Iqbal*, several district courts continued to challenge the sufficiency of Form 18 because the Federal Circuit's rulings on pure procedural issues are not binding on the lower courts. This result is at odds with the Patent Act's purpose of promoting uniformity and the very purpose of creating the Federal Circuit in the first place. Thus, the Federal Circuit should instead adopt a new test for

¹⁷⁸ Fed. R. Civ. P. 15.

¹⁷⁹ Invitrogen Corp. v. Biocrest Mfg., L.P., 424 F.3d 1374, 1378-79 (Fed. Cir. 2005).

¹⁸⁰ See e.g., Macronix Int'l Co. v. Spansion Inc., 4 F. Supp. 3d 797, 801-02 (E.D. Va. Mar. 10, 2014); Regeneron Pharms., Inc. v. Merus B.V., No. 14–CV–1650 (KBF), 2014 WL 2795461, at *1 (S.D.N.Y. June 19, 2014).

choice of law to enforce uniformity of patent law among the circuits.

One possible approach is to replace the "patent issue or non-patent issue" test with an "outcome determinative" test. That is, if choosing the local circuit's law would lead to a different result than that if the Federal Circuit's law is applied, the lower court should apply the Federal Circuit's law. This approach would not only enforce the uniformity of patent law in different circuits, but also prevent possible forum shopping activities by the plaintiffs.

B. Why the heightened pleading standard is good on balance: potential impacts on several major patent litigation players

The heightened pleading standard under *Twombly* and *Iqbal* will inevitably change the strategies used by active players in patent litigation and the landscape of the game in the coming years. This section argues why the heightened pleading standard with the recommended requirements above will be effective in curbing frivolous patent lawsuits by patent trolls and promoting a healthier system for innovations and businesses. On this count, this section discusses the potential impacts of the heightened pleading standard on some important players such as patent assertion entities, small businesses, sophisticated corporations, and representative industries such as the information technology and pharmaceutical industries.

1. Curbing frivolous lawsuits by patent trolls

Patent trolls, also known as patent assertion entities (PAEs) or non-practicing entities (NPEs), are generally regarded as entities that assert patent rights based on patents they own but do not practice any of the patented inventions. Patent trolls have been increasingly blamed for the growing costs of patent litigation by aggressively asserting claims against not only manufacturers of allegedly infringing technology but also against businesses, organizations, and individuals who are the end users of that technology. Patent trolls have been notoriously known to file frivolous lawsuits against a large number of small entities with the intention to extract settlement fees. Some patent trolls filed numerous patent lawsuits against hundreds of defendants, but none of the cases even ever reached the claim construction stage.

The behaviors of patent trolls have caused so many problems and have drawn so much attention that all branches of government have tried to decrease frivolous

¹⁸¹ See Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in A Post-Twombly World, 18 Tex. INTELL. PROP. L.J. 451, 506, n.79. (2010).

¹⁸² See Mark A. Lemley & A. Douglas Melamed, Missing the Forest for the Trolls, 113 COLUM. L. REV. 2117, 2118 (2013); Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. REV. 279, 280 (2015).

¹⁸³ Jason Rantanen, Slaying the Troll: Litigation As an Effective Strategy Against Patent Threats, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159, 164-69 (2006).

¹⁸⁴ See, e.g., id.

lawsuits by them in order to both encourage developing technology and allow businesses to utilize that technology without a looming threat of disruptive and costly litigation. Indeed, the more than ten patent bills introduced in Congress in the recently concluded 113th session mainly targeted at reducing the undesirable effects of patent trolls, Indeed, and the heightened patent infringement pleading standard have been largely expected to be one of the major tools to reduce frivolous or meritless lawsuits by patent trolls. In Indeed, In

The high litigation cost of patent cases is one of the major factors that provide patent trolls an incentive to file numerous nuisance-value infringement claims. ¹⁸⁸ According to the American Intellectual Property Law Association, the legal costs of a patent infringement action range from \$600,000 to \$5 million, depending on the patentee's potential recovery. ¹⁸⁹ Of the patent infringement cases that go to trial, the trial occurs over three years from the complaint's filing for one-third of the cases, and 12% of the cases take over five years to reach trial. ¹⁹⁰ Unable to afford such formidably high litigation costs, small businesses would choose to settle in the early stages of litigation when faced with a patent infringement suit rather than taking the case to trial, even when the patent troll's claims are meritless.

In addition to the high litigation costs, innovation costs and business costs to potential defendants also contribute to patent trolls' practice of filing nuisance-value infringement claims. When faced with an infringement claim, inventors may choose to alter their research or products to simply avoid the scope of the asserted patent; but if they cannot easily design around, the threat of a lengthy lawsuit may be enough to cause them to cease the research on a technology or the manufacture of a product entirely. ¹⁹¹ Further, a pending patent infringement suit may affect a company's ability to obtain credit or, at a minimum, increase its credit costs. ¹⁹²

The heightened pleading standard under *Twombly* and *Iqbal* has a good prospect of reducing nuisance-value infringement claims by patent trolls for at least

See, e.g., Exec. Office of the President, Patent Assertion and U.S. Innovation (2013), available at http://www.whitehouse.gov/sites/default/files/docs/patent_ report.pdf (calling for control of abusive litigation practices by patent assertion entities); supra note 182, Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. Rev. 279, 281-82 (discussing various bills introduced in Congress targeting patent trolls in an effort to "impose heightened pleading requirements on plaintiffs, to limit discovery, and to create a presumption that the losing party should pay the winner's attorneys' fees."); John M. Golden, "Patent Trolls" and Patent Remedies, 85 Tex. L. Rev. 2111 (2007).

¹⁸⁶ See Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. REV. 279.

See, e.g., Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in A Post-Twombly World, 18 Tex Intell. Prop. L.J. 451, 471-72 (2010).

¹⁸⁸ See id

¹⁸⁹ See Am. Intellectual Prop. Law Ass'n, Report of the Economic Survey 2007, at 25 (2007).

¹⁹⁰ See Moore, supra note 187, at 461.

¹⁹¹ See id. at 461-62.

¹⁹² See id. at 463.

two reasons. First, under the recommended requirements in this section, pleading direct patent infringement would require the plaintiffs to (1) identify the particular claims that are allegedly infringed, (2) at least generally identify of the accused infringing products, and (3) assert how the accused products infringe the patent claims. ¹⁹³ To meet these requirements in the complaint, the patentee is required to conduct at least preliminary investigations. The cost of such preliminary investigations would make it financially impractical, if not impossible, for a patent troll to file infringement claims against hundreds of potential defendants at the same time. Thus, the heightened pleading standard forces patent trolls to at least strategically choose which defendants they want to sue, instead of filing a suit against every potential defendant indiscriminately.

Second, even if a patent troll decides to invest some money in preliminary investigations and files the complaints, it still would need to withstand Rule 12(b)(6) motions to dismiss under the *Twombly/Iqbal* standard in order to trigger the costly litigation proceeding. District courts, acting as gatekeepers, will be able to exercise their discretionary power under *Twombly/Iqbal* to dismiss vague claims brought by patent trolls and relieve the defendants from further litigation costs. And with the "new" sword of Rule 12(b)(6) motions, defendants will be less likely than before to settle claims with patent trolls when their claims are meritless. This would further discourage patent trolls from filing batches of frivolous claims against small businesses with the intent of extracting licensing fees.

2. Protecting small businesses

Due to the potential chilling effect of the heightened pleading requirement on patent trolls' strategy of filing batches of nuisance-value infringement claims, as discussed above, small businesses named as defendants will greatly benefit from not having to defend themselves against frequent frivolous infringement lawsuits against patent trolls. The main concern, therefore, is whether the heightened pleading standard will cause undesired damage to small business patent holders when they try to enforce their patent rights against other corporations, especially large sophisticated corporations. Such concern is largely unwanted, however, under the *Twombly/Iqbal* pleading framework.

First, the heightened pleading standard does not add to the cost of meritorious litigation. Even before the heightened pleading requirement, many patentees, including small businesses, were already conducting pre-suit investigations to evaluate the value of their cases. Indeed, according to Rule 11, plaintiffs should be performing a pre-suit investigation anyway to avoid potential sanctions, at least to the extent possible. ¹⁹⁴ A heightened pleading requirement would therefore only impose additional costs on those unscrupulous plaintiffs who take advantage of the lower

¹⁹³ See supra, Section IV.A.

Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in A Post-Twombly World, 18 Tex. Intell. Prop. L.J. 451, 502 (2010).

pleading standard.

Further, the local rules in many district courts with large dockets of patent cases already require plaintiffs to disclose the information required in the complaint under the *Twombly/Iqbal* standard at a very early stage of the case. For example, in the Eastern District of Texas, a patent holder must provide detailed disclosures of its asserted claims and infringement contentions ten days before the initial case management conference, ¹⁹⁵ and the Northern District of California requires a patent holder to provide that information immediately after the conference. ¹⁹⁶ Thus, instead of requiring plaintiffs to discover more facts and disclose them shortly after filing the complaint, the heightened pleading standard merely requires that they put them into the complaint.

Finally, the *Twombly/Iqbal* standard would grant district judges the discretion to allow a small business plaintiff to conduct limited discovery for the purpose of meeting the heightened pleading standard when the plaintiff's claim shows sufficient merit. In some cases, due to the nature of the patented technology, it would be fair to allow a small business plaintiff with limited resources to discover a defendant's secret use of the patented claims rather than dismissing the claim up front. Indeed, at least one district court has recently allowed plaintiffs to undertake limited discovery at the motion-to-dismiss stage because evidence about key facts was inaccessible to them.¹⁹⁷

One possible negative effect of the heightened pleading standard on small businesses, especially individual inventors, would be that with the decreasing business of patent trolls, it will be harder for small businesses to sell their patents to patent trolls. However, selling patents to patent trolls is not the only way that small businesses or individual investors could recoup their investment in their patents. Further, the heightened pleading standard only discourages infringement claims with nuisance value, but not those cases with true merit. Therefore, if a small business or individual investor has a strong patent, they still have a good market for sale. In this sense, the heightened pleading standard discourages small entities from filing weak patents for the purpose of selling them to patent trolls.

3. Comparatively less impact on large sophisticated corporations

Compared with small entities, large sophisticated corporations will likely be

¹⁹⁵ E.D. TEX. LOCAL R. 3-1.; see also Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. Rev. 279, 289-90 (2015).

¹⁹⁶ N.D. CAL. LOCAL R. 3-1 (disclosure required two weeks after the initial case management conference).

¹⁹⁷ See, e.g., Rice v. Murakami, No. 1:13-CV-441, 2014 WL 2780977, at *1-2 (D. Idaho June 18, 2014) (finding that the plaintiff's complaint failed to meet the requirements of Iqbal but ordering "limited discovery" to allow the plaintiff "a fair opportunity to amend his complaint to satisfy the Iqbal standards").

less affected by the heightened pleading standard under *Twombly* and *Iqbal*. Unlike small entities, large corporations have much more resources to defend themselves against nuisance-value infringement claims asserted by patent trolls. As a general strategy to deter future frivolous infringement claims against them, large corporations would not simply settle with patent trolls in the early stage but would take the case to trial and make every effort to invalidate the asserted patents. ¹⁹⁸ Because of this, nuisance-value infringement claims by patent trolls are usually directed to small businesses, who are more willing to settle and take a license, rather than to large sophisticated corporations. This is especially true when the validity of the asserted patent is in doubt.

The heightened pleading standard will not have much impact on large sophisticated corporations as plaintiffs either. As discussed above, even before the heightened pleading standard, plaintiffs were already conducting pre-suit investigations to evaluate the value of their cases and to avoid possible Rule 11 sanctions, ¹⁹⁹ and this is even truer for large corporations. Further, large corporations are less likely to be plaintiffs. This is because their products usually involve a large number of patented technologies, many of which are possibly held by their competitors. ²⁰⁰ Therefore, it makes more business sense for large corporations to cross-license their patents with their competitors rather than file lawsuits against each other.

4. Different levels of impact on pharmaceutical and information technology industries

It has been reported that patent troll lawsuits have affected various industry sectors disproportionately. Therefore, it will not be surprising that different industries will be affected by the heightened pleading standard to different extent. Patents in pharmaceuticals and biotechnology pose significantly different issues, in the context of infringement actions, from those posed by information technology patents. Pharmaceutical patents often attract a relatively small number of infringement claims as the patented drugs can be precisely described by their distinct molecular structures. By contrast, an information technology company may have a patent with a large number of claims or multiple patents that are "stacked" together to cover a product, which is much more commonly targeted by patent troll suits. 203

The heightened pleading standard will impact the pharmaceutical industry and information technology industry differently in at least three aspects. First, due to the

¹⁹⁸ See generally Jason Rantanen, Slaying the Troll: Litigation As an Effective Strategy Against Patent Threats, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159 (2006).

¹⁹⁹ See supra Section IV.B.2.

See generally Herbert Hovenkamp et. al., Anticompetitive Settlement of Intellectual Property Disputes, 87 MINN. L. REV. 1719, 1720 (2003).

Thomas H. Kramer, Proposed Legislative Solutions to the Non-Practicing Entity Patent Assertion Problem: The Risks for Biotechnology and Pharmaceuticals, 39 Del J. Corp. L. 467, 477-78 (2014).

²⁰² Id. at 490.

²⁰³ Id. at 477-78 and 490.

different nature of inventions described above, pharmaceutical and biotechnology patents tend to have far fewer claims than patents on information technology. ²⁰⁴ Therefore, the requirement to assert specific patent claims in the complaint is less imperative in a litigation involving pharmaceutical or biotechnology patents than that involving information technology patents. Second, while a certain drug is usually covered by one patent with a few claims, an electronic device or software may be covered by several patents with hundreds of claims. ²⁰⁵ Therefore, a requirement to identify the specific products and specific aspects of the products that are allegedly infringing is of much more significance to the information technology industry. Consequently, requiring the plaintiff to assert the specific patent claims and the specific infringing products would affect the information industry much more than the pharmaceutical industry.

Finally, in the pharmaceutical or biotechnology industry, a patent holder is usually unable to obtain information about its competitor's potentially infringing manufacturing processes without discovery, rendering some patent holders with legitimate infringement claims unable to provide the required specificity under the heightened pleading standard.²⁰⁶ On the other hand, reverse engineering in the information technology industry is a common practice used to find out how a product or process allegedly infringes a patent claim. Therefore, requiring the patentee to assert how the accused product or process infringes the asserted claims in the complaint will impose much more difficulty for the pharmaceutical or biotechnology industry.

The heightened pleading standard's possible bigger impact on the information technology industry than on the pharmaceutical industry is expected and desirable. As discussed above, the information technology industry is much more frequently targeted by frivolous behaviors of patent trolls than the pharmaceutical industry. Therefore, it would be a good result if the heightened pleading standard would be able to significantly reduce patent trolls' frivolous claims against the information industry and leave the pharmaceutical industry largely intact. To the extent that the heightened pleading standard could in some cases make it hard for a pharmaceutical company to bring meritorious suits because it is impractical to obtain information regarding how its claims are infringed, district judges can exercise their discretion to permit limited discovery at the motion-to-dismiss stage as permitted by the

²⁰⁴ *Id.* at 490.

²⁰⁵ See id.

See Paul R. Gugliuzza, Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure, 95 B.U. L. REV. 279, 301 (2015); H.R. Rep. No. 113-279, at 105-06 (2013); Hearing on Small Businesses and Patent Abuse Before the S. Comm. on the Judiciary, 113th Cong. (Dec. 17, 2013) (remarks of Steve Bossone, Vice President, Intellectual Property, Alnylam Pharms.), available at http://www.judiciary.senate.gov/download/testimony-of-bossone-pdf&download=1, archived at http://perma.cc/8JLF-SYKR.

Twombly/Iqbal standard.207

VII. Conclusion

With the recent abrogation of Rule 84 and Form 18, the law of patent infringement is pleading at the corner of another turn. It will take courts several years to hash out what exactly the heightened pleading standard under *Twombly* and *Iqbal* requires, but district courts have been experimenting with this issue already. As this article argues in the last section, the changes to come will likely be more effective in reducing nuisance-value infringement claims, and the new standard will likely serve the purpose of promoting innovations and businesses better than the old standard.

²⁰⁷ See Gugliuzza, supra note 206, at 301.