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A review of developments in Intellectual Property Law

Motions to Amend at the PTAB after *Aqua Products, Inc. v. Matal* – What's a Patent Owner to Do?

By Andrew W. Williams, Ph.D.

In 2011, Congress enacted the America Invents Act and created new mechanisms to challenge issued claims at the Patent Office. The goal was to expeditiously resolve issues of patent validity in response to the public outcry that validity challenges in the federal courts were too difficult, costly, and time-consuming. In these new proceedings, petitioners were provided many advantages over similar actions in district courts, such as a lower evidentiary standard. In what appeared to be an attempt to even the playing field, Congress provided patent owners with the statutory authority to amend claims in these proceedings – a benefit not available in Federal court.

However, in practice, this ability has proven all but illusory. This is plainly demonstrated by the Motion to Amend Studies conducted by the Patent Trial and Appeal Board ("PTAB" or "Board") that analyzed statistics in all IPRs, CBMs, and PGRs. The third and most recent iteration included data through the Fiscal Year 2017 (which ended on September 30, 2017). The first thing this study revealed is that motions to amend were filed in only 275 out of 2,766 completed trials, or 10%. The Board counted a trial as "completed" when it was terminated due to settlement, when there was a request for adverse judgement, when it was dismissed, or when there was a final written decision. Moreover, joined or consolidated trials were only counted once in the statistics. Then, out of those 275 trials, a decision on the merits was only reached for 170 motions to amend with substitute claims. Strikingly, the motions were only granted in four cases, with a grant-in-part in an additional 10 cases.

These low numbers have been thought to be due, at least in part, to the fact that the Patent Office put the burden on the patent owner to prove patentability. This burden shifting to the patent owner, however, was not found in either the statute or the rules promulgated by the Patent Office. Instead, the PTAB interpreted its regulations in an early decision, *Idle Free Sys., Inc. v. Bergstrom, Inc.*[1] In *Idle Free,* the PTAB indicated that the burden is on the patent owner to show "a patentable distinction over the prior art of record and also prior art known to the patent owner."[2] The Board subsequently relaxed the patent owner's burden in *MasterImage 3D, Inc. v. RealD Inc.,* by only requiring the patent owner to identify how its claim amendments were patentable over the "prior art of record," which could include "any material art in the prosecution history of the patent."[3] Two three-judge panels of the Federal Circuit approved of the PTAB's interpretations of its own regulations, *Microsoft Corporation v. Proxyconn, Inc.* for the *Idle Free* interpretation and *Nike v. Adidas* (Fed. Cir. 2016) for the *MasterImage* clarification. As

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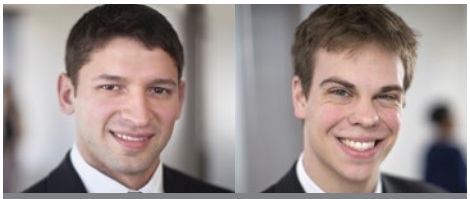

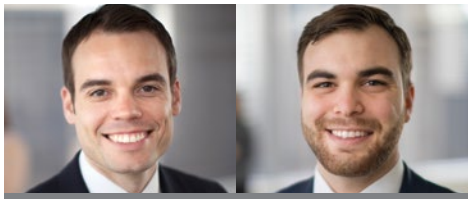

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a result, an *en banc* decision was required at the Federal Circuit to allow them to correct this practice via appellate review. And this is exactly what the Federal Circuit did last year.

Aqua Products, Inc. v. Matal

In *Aqua Products, Inc. v. Matal,* a highly fractured *en banc* Federal Circuit determined that the PTAB can no longer place the burden of establishing the patentability of amended claims on the patent owner in IPR proceedings.[4] The decision itself contained multiple opinions (five to be exact) and, not surprisingly, figuring out the actual outcome is anything but trivial. Even identifying which judge agreed with which opinion is fairly convoluted. The "main" opinion was authored by Judge O'Malley, and was joined by Judges Newman, Lourie, Moore, and Wallach. It expressed the judgment of the court because Judges Dyk and Reyna concurred in the result. However, despite 148 pages of opinions, there were only two legal conclusions (according to Judge O'Malley) that can be gleaned as supporting the judgment of the court. The rest, as Judge O'Malley put it, were cogitations.

The first legal conclusion stemmed from the belief of the majority that 35 U.S.C. § 316(e), the statute that establishes the evidentiary standard for IPRs, was ambiguous with regard to whether the burden of persuasion of establishing the unpatentability of substitute claims should be on the petitioner. Correspondingly, because it was necessary to reach "Chevron Step Two," the court found that "the PTO has not adopted a rule placing the burden of persuasion with respect to the patentability of amended claims on the patent owner that is entitled to deference."[5] The second legal conclusion flowed from this, specifically "in the absence of anything that might be entitled to deference, the PTO may not place that burden on the patentee."[6] As a result, the court vacated the original PTAB final written decision "insofar as it denied the patent owner's motion to amend."[7] The case was "remanded for the Board to issue a final decision under § 318(a) assessing the patentability of the proposed substitute claims without placing the burden of persuasion on the patent owner."[8] Moreover, the Board was instructed to follow the same practice "in all pending IPRs unless and until the Director engages in notice and comment rule-making."[9]

The only opinion (or part thereof) that garnered a majority of the Judges was authored by Judge Reyna. His opinion was joined in whole by Judge Dyk, but included a "Part III" that was joined by Chief Judge Prost and Judges Taranto, Chen, and Hughes. Interestingly, these four all dissented from the ultimate judgment. This Part III was directed to the burden of production, and specifically whether the patent owner as the moving party has the burden of production for motions to amend. Judge O'Malley belittled Part III because it allegedly had no proposed judgement attached to it. Therefore, according to her, it amounted to nothing more than dicta. Judge Reyna disagreed, arguing that Part III of his opinion did set forth a judgement of the court "on what the Board may and may not do with respect [to] the burden of production on remand in this case."[10] He concluded that "the Patent Office must by default abide by the existing language of inter partes review statute and regulations, § 316(d) and 37 C.F.R. § 42.121, which only allocate a burden of production to the patent owner."[11] In subsequent decisions, the Patent Office appears to disagree with Judge O'Malley that Judge Reyna's pronouncement was mere dicta because it has cited to Part III of his opinion as authoritative.[12]

Moreover, the *Aqua Products* decision left open the possibility that the burden of persuasion for claim amendments could be placed back on the patent owner, provided the Office first goes through proper notice and comment rule-making.

The *Aqua Products* case, however, might not be the panacea hoped for by patent owners. It is possible that more claim amendments will survive such proceedings, and it is likely that more motions to amend will be filed. But any amended claim will still be susceptible to intervening rights. Considering that the majority of patents involved in IPRs are also being asserted in concurrent district court litigation, claim amendments might not always be feasible.

The Chief Judge Responds

On November 21, 2017, PTAB Chief Judge Ruschke issued a memorandum entitled "Guidance on Motions to Amend in view of *Aqua Products*."[13] The Chief Judge based his guidance on one aspect of the *Aqua Products* case, specifically that "the Board will not place the burden of persuasion on a patent owner with respect to the patentability of substitute claims presented in a motion to amend."[14] In fact, the guidance suggested that "practice and procedure before the Board will not change," other than that motions to amend will be granted in cases in which the "entirety of the evidence of record before the Board is in equipoise as to the unpatentability of one or more substitute claims . . . ."[15] As a result, patent owners must still meet the requirements for amending the claims as found in 37 C.F.R. § 42.121 (or § 42.211 for PGR proceedings), including only proposing a reasonable number of substitute claims, not enlarging the claim scope or introducing new matter, and making the claim amendments responsive to a ground of unpatentability involved in the trial. Moreover, the Chief Judge reminded patent owners (as well as petitioners) that they have a duty of candor and good faith to the Office during the proceedings, pursuant to 37 C.F.R. § 42.11. Correspondingly, patent owners still have a duty to disclose information of which they are aware that would be material to the patentability of any substitute claims.

With regard to how motions to amend will be handled procedurally, Chief Judge Ruschke also indicated that nothing will change. Therefore, the rules regarding types, timing, and page limits for briefs will not change. In addition, the standard scheduling order will continue to provide that patent owners may file motions to amend on "Due Date 1." And not surprisingly, patent owners are still required to confer with the Board before filing a motion to amend as provided by 37 C.F.R. §§ 42.121(a) and 42.221(a). With regard to trials that have already been instituted, the Chief Judge

implied that the Board would be open to addressing new or substitute claims.[16]

Does Anyone Have The Burden (and Will That Change)?

The one detail that is missing from the guidance is whether the petitioner bears any burden with regard to motions to amend. Even while acknowledging that the patent owner does not bear the burden of persuasion, the Board has apparently taken the position that no one actually does. Instead, the Board has indicated that it will rule on such motions by simply looking at the entirety of the record.[17] This raises the possibility that the Board could deny a motion to amend in cases where the patent owner has satisfied the statutory requirements, even where the petitioner has not opposed the motion (or provided any evidence with regard to the substitute claims).

Moreover, the *Aqua Products* decision left open the possibility that the burden of persuasion for claim amendments could be placed back on the patent owner, provided the Office first goes through proper notice and comment rule-making. There has been no indication from the Office that it intends to do so. But in an action that might have tipped its hand, the Office recently filed an Intervenor's Petition for Panel Rehearing in the case of *Bosch Automotive Service Solutions, LLC v. Matal*.[18] The Office is not asking the Court to alter its judgment in the case, but rather to revise the opinion because it believes the panel decision incorrectly stated the holding of *Aqua Products* when it said: "Rather, the petitioner bears the burden of proving that the proposed amended claims are unpatentable 'by a preponderance of the evidence.' 35 U.S.C. § 316(e)."[19] This reading would suggest that the statute is not ambiguous, and as such, any promulgated rule would not be entitled to *Chevron* deference. While the Office may have a valid point, it begs the question why it is expending the energy and resources to request this change. That is, unless it has plans to promulgate a new rule in the future.

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Endnotes

1 IPR2012-00027, Paper 26 (PTAB June 11, 2013).
2 *Id.* at 7.
3 IPR2015-00040, Paper 42 at 2 (PTAB July 15, 2015).
4 872 F.3d 1290, 1296 (Fed. Cir. 2017).
5 *Id.* at 1327.
6 *Id.*
7 *Id.* at 1296.
8 *Id.* at 1328.
9 *Id.*
10 *Id.* at 1341.
11 *Id.* at 1342.
12 *See, e.g.,* Apple Inc. v. Personalized Media Communications LLC, IPR2016-01529, Paper 38 at 56 (PTAB Feb. 15, 2018) ("'There is no disagreement that the patent owner bears a burden of production in accordance with 35 U.S.C. § 316(d). Indeed, the Patent Office has adopted regulations that address what a patent owner must submit in moving to amend the patent.' [*Aqua Products*] at 1341.")
13 Memorandum from David P. Ruschke, Chief Administrative Patent Judge, to the Patent Trial and Appeal Board, U.S.P.T.O (Nov. 21, 2017), *available at* https://www.uspto.gov/sites/default/files/documents/guidance_on_motions_to_amend_11_2017.pdf
14 *Id.* at 2.
15 *Id.*
16 *Id.* at 3.
17 *See, e.g., Apple Inc.,* IPR2016-01529, Paper 38 at 57 (Accordingly, we base our decision on the substitute claims provided in the Motion to Amend on the entirety of the record before us.)
18 878 F.3d 1027 (Fed. Cir. 2017).
19 *Id.* at 1040.

MBHB Highly Ranked in Key Intellectual Property-Related Practice Areas within 2018 Edition of *U.S.News*-Best Lawyers "Best Law Firms"

McDonnell Boehnen Hulbert & Berghoff LLP ("MBHB") is highly ranked in key intellectual property-related practice areas within the 2018 edition of *U.S.News*-Best Lawyers "Best Law Firms" at the national and metropolitan levels. Overall rankings are based on a rigorous evaluation process that includes the collection of client and lawyer evaluations, peer review from leading attorneys in their relevant practice area(s), and a review of additional information provided by law firms as part of the formal submission process. Firms included in the 2018 "Best Law Firms" edition are recognized for professional excellence with persistently impressive ratings from clients and peers. Achieving a ranking signals a unique combination of quality law practice and breadth of legal expertise.

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The Patent Landscape of Cryptocurrency and Blockchain

By Alexander D. Georges and James L. Korenchan

With Bitcoin and alternative coins, such as Ethereum, Ripple, and Cardano, experiencing volatile price swings, cryptocurrencies have rapidly become mainstream and widely discussed, with many seeking to find ways to profit from the new technologies propelling their creation and adoption. As the price of Bitcoin skyrocketed 32,500 percent from under four hundred dollars at the beginning of 2016 to over thirteen thousand dollars by the end of 2017, the number of cryptocurrency and blockchain patent applications filed at the United States Patents and Trademark Office (USPTO) nearly doubled. Further, a keyword search for "blockchain" or "cryptocurrency" shows that there are over 700 pending published applications containing at least one of these terms. Indeed, that number may be even greater considering some applicants choose not to publish their pending applications. The same search also shows that companies, universities, and individual inventors alike are racing to obtain patent protection in this area.

In general, a cryptocurrency is a decentralized, encrypted digital currency that is transferrable between peers. Transactions completed using the cryptocurrency are typically maintained in some form of distributed public ledger via a "mining" process. Starting with the initial creation of a cryptocurrency coin (e.g., a Bitcoin), each and every transaction is confirmed and stored in the public ledger (e.g., a blockchain), which involves identical copies distributed among peers maintaining the public ledger. The public ledger does not include information regarding the real-world identities of owners of the cryptocurrency coin. Rather, it maintains an address, similar to an account number, and a balance (i.e., the amount of cryptocurrency coins associated with that address) for each account. Using cryptographic techniques, the distributed public ledger offers an unmodifiable history of cryptocurrency transactions between the various addresses, which enables digital wallets of coin owners to calculate accurate balances and ensure that each transaction uses only coins currently owned by the spender, preventing the possibility of double spending.

To facilitate a transaction using cryptocurrency, digital wallets use encrypted, electronic signatures that serve as cryptographic proof that the transaction originates from the owner of the wallet. In order to record the transaction in the public ledger, "miners" (e.g., decentralized computing systems participating to support the public ledger) approve the transaction by working to solve an increasingly-complex computational problem with the first "miner" that solves the puzzle adding a "block" representing the transaction to the public ledger. By representing confirmed transactions as blocks in the distributed public ledger, an individual cannot modify the transaction history of the coin without modifying a majority of the copies of the public ledger maintained by the various peers. Therefore, once a block is mined and added to the ledger, all conforming transactions are essentially permanent and the miner is rewarded with a relatively small transaction fee. This way, mining can serve as a proof-of-work system that gives value to cryptocurrency.

> **The continued pursuit of cryptocurrency and blockchain-related patents has helped legitimize the underlying technologies that make cryptocurrencies possible.**

Accordingly, cryptocurrencies and their underlying technologies can offer numerous benefits over current payment methods, although some benefits remain hypothetical. The peer-to-peer network aspect has the potential to eliminate the need for third-party financial services, such as Visa and American Express, and their accompanying fees. Rather, transactions are immediately settled upon confirmation by the decentralized network of miners. Cryptocurrencies can also bring financial services and stability to underdeveloped areas in the world while maintaining anonymity to prevent the potential for identity theft.

Rise In Patent-Related Interest

With speculation in cryptocurrencies at all-time highs, patent applications for blockchain and other crypto-related technologies have been filed by a variety of applicants led by major companies like Microsoft, International Business Machine (IBM), Mastercard, Security First Corp. (a data security company), Medici Inc. (a distributed ledger developer), and Bank of America. Along with major companies, cryptocurrency exchanges like Coinbase are attempting to carve out their niche with patents. But these entities are not the only ones seeking patent protection. Universities, small entities, and individual inventors are also pursuing patent protection. Craig Wright – who at one time claimed to be Satoshi Nakamoto, the alleged founding father of Bitcoin – and his associates have filed over 70 patent applications related to cryptocurrency.

Although many such patent applications still await examination, patents that have been granted thus far cover a wide range of cryptocurrency-related technologies. For instance, Coinbase has received a handful of patents in recent years directed towards implementing cryptocurrency transactions at a point-of-sale using a mobile device, security systems for cryptographic transactions, blockchain identity management systems, a tip button for bitcoin transactions, and techniques for analyzing transactions in a distributed ledger. Other examples of granted patents include a patent for a system that settles securities using a custom cryptocurrency, which was awarded to the financial giant, Goldman Sachs, and a patent for "a platform to manage exchange rates between various currencies, transfer requests, and customer accounts" awarded to Bank of America, a company that has filed over 20 crypto-related patent applications in 2017. The patented platform secured by Bank of America aims to mitigate illicit actions with cryptocurrency exchanges and uses three accounts: a customer account, a "float" account that contains the cryptocurrency that the customer is selling, and another float account that contains the

cryptocurrency that the customer is purchasing. Bank of America has also filed applications covering transaction validation, risk detection, real-time conversion, online/offline storage, and other aspects of the technology.

Apple, the global smartphone maker, has also joined the hunt for crypto-related patents by filing numerous patent applications, including one directed toward a process for verifying the reporting, maintenance, and validation of timestamps using blockchain and distributed ledger technology. Various entities have strived to obtain patent protection in these and other areas of cryptocurrency as well.

Effects From Increased Interest

The continued pursuit of cryptocurrency and blockchain-related patents has helped legitimize the underlying technologies that make cryptocurrencies possible. In addition, the recent increase in patent filings (and allowances) in this field has increased public awareness and interest in the industry.

There are some potential drawbacks that come with increased patent application filings. Some companies file patent applications to legally reserve spots within the technology before developing useful applications of the technology. This strategy is often used by larger companies having expendable resources to prevent others from participating in and advancing the technology. A larger company can also threaten litigation to eliminate potential competition from smaller companies. This form of legal bullying is not unique to this type of technology, but it can ultimately end up hurting the general public.

To date, however, no cryptocurrency-related patent has been litigated. And given today's patent-eligibility climate, enforcing a blockchain or cryptocurrency patent may be difficult. Any issued patents may meet a fate similar to recent financial-based patents that have struggled to pass review, though only time will tell. To gauge the eligibility climate, some companies may be filing patents to test whether or not the USPTO will find the technology patentable. As a result, the USPTO may have to develop consistent guidelines that examiners can follow to ensure that each application in this field is viewed under the same light.

Enforceability is not the only obstacle to litigation. For example, the Blockchain Intellectual Property Council (BIPC), which includes prominent players such as IBM, CoinDesk, Microsoft, Deloitte, Digital Currency Group, and Ernst & Young, aims to "develop a global, industry-led defensive patent strategy" for avoiding patent trolls. The BIPC also seeks to facilitate the coexistence of patent protection and industry growth, and has discussed non-aggression agreements and cross-licensing opportunities between its members, among other strategies. Another obstacle is the open-source software guidelines that most coins (e.g., Bitcoin, Ethereum, Ripple) utilize. Because there are many open-sourced cryptocurrencies, the disclosures related to these currencies may prevent other companies from getting patents. Further, smaller less-known cryptocurrencies may make their technology public, without having a large adoption rate. These public disclosures may be used to reject patent applications and/or to invalidate patents during litigation. In addition, companies such as Intel, Cisco, IBM, J.P. Morgan, and Wells Fargo have worked together to create an open-source standard for distributed ledgers.

Conclusion

As with many new technologies, the future of cryptocurrencies is speculative. Still, blockchain and other underlying technologies that make cryptocurrencies possible appear to have the potential to change industries and everyday life. The race for patent protection in this industry remains an interesting ongoing story, and serves as evidence that many in the industry have faith in its growth and longevity.

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Endnotes

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Fair Use and Social Media Sites like BuzzFeed

By Diego F. Freire

Fair use, an evolving doctrine and a very popular fallback for those on the Internet, has continued to be "the most troublesome in the whole law of copyright."[1] Its goal has been to promote freedom of expression in order to achieve copyright's overall purpose of promoting the progress of knowledge and learning.[2] But in the age of social media, when about 96 percent of young adults between the ages of eighteen and twenty-nine use the Internet,[3] freedom of expression is accomplished through the sharing of content, licensed or not.[4] Social media sites like Facebook, YouTube, and BuzzFeed encourage the sharing of such content and arguably rely on it. This has led to social media sites being sued for copyright infringement. Social media sites like BuzzFeed have used fair use as an affirmative defense but it's unclear if they have such protection.

Fair Use and Freedom of Expression

Copyright law in the United States was designed to provide a marketable right for the creators and distributors of copyrighted works.[5] It does not recognize moral rights and therefore places marketable rights over those of author's rights.[6] But, because of the United States' strong tradition of freedom of speech, copyright tries to balance those marketable rights with the promotion of freedom of expression. Fair use was therefore codified to promote such freedom of expression through the unlicensed use of copyrighted works in certain circumstances.[7] Due to the balancing of marketable rights and freedom of expression, fair use has been an evolving doctrine. However, because technology has allowed for greater human connections and forms of expressions, fair use is evolving at a greater pace than before.

In determining whether fair use applies to the use of a particular work, there are four factors to be considered and they must be weighed together.[8] The first factor is the purpose and character of the use, and whether, and to what extent, the new work is transformative.[9] The second factor is the nature of the copyrighted work and whether the new work is being used in the same way. The third factor is the amount and qualitative value of the original work as compared to the defendant's justification for the use. The fourth factor is the commercial impact the new work has on the copyrighted work. Although these four factors may not be treated in isolation but weighed together in light of the purpose of copyright, case law suggests that the most dispositive factor is the purpose and character of the use.[10] This includes looking at whether and by how much the use of the copyrighted work was transformative and if the use was commercial. A work is transformative if it "adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message."[11]

Although social media sites like YouTube have found protection in the safe harbor provision of the Digital Millennium Copyright Act, social media sites like BuzzFeed, who are themselves taking steps that infringe on others copyright for a profit, generally cannot.

Social Media and Copyright Infringement

Social media companies like YouTube have been sued for copyright infringement for the sharing of copyrighted works without the owner's permission. However, YouTube, and other companies that have a platform for others to post content, have found protection in the safe harbor provision of the Digital Millennium Copyright Act.[12] The safe harbor provision "limits the liability of online service providers for copyright infringement that occurs 'by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider.'"[13]

Companies like YouTube, Tumblr, and Pinterest are considered internet service providers that allow users to upload content. They are protected by the safe harbor provision because such companies presumably do not have actual knowledge that the material is infringing, they are not aware of circumstances from which infringing activity is apparent or upon obtaining such knowledge they act expeditiously to remove the material. The same can be argued for social media sites like Instagram and Facebook. But, sites like BuzzFeed may arguably be different, since they have actual knowledge of the infringement because they themselves post and share the copyrighted works within their articles without permission of the copyright owners.

BuzzFeed

BuzzFeed is a digital media company that delivers news and articles through the use of social media.[14] BuzzFeed, as a digital media company, creates articles with content (such as photographs), publishes the articles on their website, and promotes the articles by sharing through social media. BuzzFeed has been known to use unlicensed works in their articles.[15] It has also been sued for copyright infringement, for instance, in a case where a photographer sued BuzzFeed for $3.6 million for the use of a photograph in their article without the owner's permission.[16] The case involved using a photograph of a female soccer player heading a ball. BuzzFeed subsequently shared the article throughout social media. The plaintiff, because of the high cost of litigation, appeared pro se.[17] BuzzFeed, when discussing their use of unlicensed works, has claimed that their activity falls under fair use because they believe that they used the work in a transformative way, for example through the sequencing and framing of photographs in an article.[18]

Now, some have argued for an even wider application of the fair use doctrine because of online culture, which promotes sharing content as a way of communicating.[19] But it can be argued that the activity of companies like BuzzFeed are different because they are not users involved in a discussion but, rather,

a company making a profit off another person's work. Cases filed against BuzzFeed are rare, possibly due to the expense of litigation and possibly because the fair use doctrine continues to evolve. This comes down to plaintiffs not wanting to take a chance by taking their case to court for fear of losing. Copyright cases that do go to court usually settle for the same reasons as stated above.[20] The cases that don't settle have rendered judgments that seem to have expanded the boundaries of fair use.[21] So, although fair use may arguably not apply to BuzzFeed's use of content, because of their limited arguments regarding transformative use, there is no clear case law that prevents BuzzFeed from claiming fair use through trial, resulting in companies, including BuzzFeed, to continue operating as such.

Conclusion

Although social media sites like YouTube have found protection in the safe harbor provision of the Digital Millennium Copyright Act, social media sites like BuzzFeed, who are themselves taking steps that infringe on others copyright for a profit, generally cannot. Therefore, they depend on the fair use doctrine. Fair use is an evolving doctrine meant to promote freedom of expression but because of online expression and online culture it is unclear how far it has expanded and whether it protects companies like BuzzFeed. But, what is clear is that many copyright infringement cases do not go to court and most of the cases that do go to court are settled. This allows BuzzFeed to continue to claim fair use, whether it truly applies to their activities or not.[22]

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Endnotes

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7 *See* U.S. Copyright Office, *supra* note 2.
8 17 U.S.C. § 107 (2012).
9 *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 584 (1994) (The court found that a parody's commercial character is only one element to be weighed in a fair use enquiry and a sufficient consideration must be given to the nature of the parody in weighing the degree of copying.)
10 Barton Beebe, *An Emperical Study of U.S. Copyright Fair Use Opinions*, 1978-2005, 156 U. PA. L. Rev. 549, 556 (2008); Levinson, *supra* note 4, at 1063.
11 Campbell, 510 U.S. at 579.
12 *See, e.g.,* Viacom Int'l, Inc. v. YouTube, Inc., 940 F. Supp. 2d 110, 123 (S.D.N.Y. 2013) ("defendants are protected by the safe-harbor provisions of the Digital Millennium Copyright Act, 17 U.S.C. § 512(c) from all of plaintiffs' copyright infringement claims.").
13 Viacom Int'l, Inc. v. YouTube, Inc., 676 F.3d 19, 25 (2d Cir. 2012).
14 *See* BUZZFEED, *https://www.buzzfeed.com/about.*
15 Alexis C. Madrigal, Where Do All Those Buzzfeed Cute Animal Pictures Come From?, THE ATLANTIC (Apr. 30, 2012), http://www.theatlantic.com/technology/archive/2012/04/where-do-all-thosebuzzfeed-cute-animal-pictures-come-from/256547.
16 Complaint at 7-8, Eiselein v. Buzzfeed, Inc., No. 13-3910 (S.D.N.Y. June 7, 2013). *See also https://arstechnica.com/tech-policy/2013/06/buzzfeed-sued-for-3-6-million-over-fairly-boring-soccer-photo/*
17 *Id.*
18 Madrigal, *supra* note 15.
19 Levinson, *supra* note 4 at 1050-51 ("Typically, individuals use social media accounts to join in a conversation with other users regarding the subject matter of the original post. Thus, the Internet is unique because it is a place where freedom of expression proliferates and individuals with different perspectives can share content in order to communicate their beliefs, opinions, and thoughts to a wider audience. .. Consequently, some scholars argue that this characteristic should be considered when analyzing the transformative quality of a secondary user's sharing behavior.").
20 See Stipulation of Dismissal, Eiselien v. Buzzfeed, Inc., No. 13-39010 (S.D.N.Y. Dec. 20, 2013).
21 *See* Equals Three, LLC v. Jukin Media, Inc., 139 F.Supp.3d 1094, 1104 (C.D. Cal. 2017) (The court found that reaction videos that create something new should be protected by the fair use doctrine.). *See also* Alyaman Amin Amer, Reaction Videos and Fair Use, Vol. 15, Snippets, Issue 4, 12 (Fall 2017).
22 In the past, BuzzFeed has claimed to be moving the site away from a free-for-all approach. Adrian Chen, Remix Everything: BuzzFeed and the Plagiarism Problem, GAWKER.COM, http://gawker.com/5922038/remix-everything-buzzfeed-and-the-plagiarism-problem.

Patent Infringement Analysis Varies Based on Statutory Claim Type

By Joseph A. Herndon and Adnan "Eddie" M. Obissi

Patent claims serve to provide notice as to the scope of an invention described in a patent. The claims can be directed to various statutory types, such as an apparatus, article, composition, method, system, or any other patentable subject matter. For example, when the invention is a mechanical device, the claims are generally characterized as apparatus- or system-type claims, and detecting infringement of such claims can be as simple as finding a similar physical device in the market. In contrast, software-related inventions can be claimed as a method, as a system that carries out software operations, or as a computer-readable medium (CRM) that contains program instructions, each of which may be infringed in different contexts. Detecting infringement of software-related patents can be more cumbersome because such inventions can be collectively executed by several distinct components or produce outputs that are not visually apparent. This article focuses on different standards for infringement of software patents based on whether the patent has method, system, or CRM claims, and explains the practical implications of these differences.

> **Because patent applicants are allowed three independent claims before paying a fee, practitioners drafting a software-related patent should craft claim sets that cover independent method, system, and CRM claims directed to the same invention to take advantage of the different standards of infringement.**

Under 35 U.S.C. § 271(a), a party infringes a patent when it, without authority, makes, uses, offers to sell, sells, or imports the patented invention within the United States.[1] The Federal Circuit has found that "[n]ot only will the [infringement] analysis differ for different types of infringing acts, it will also differ as the result of differences between different types of claims."[2] Accordingly, software patents are often subject to multifaceted infringement analyses during litigation. For example, in *NTP, Inc. v. Research In Motion, Ltd.*, the Federal Circuit performed discrete infringement analyses for method and system claims directed to a software invention.[3] These different standards for infringement of software claims should influence the way a software-related patent is drafted.

Method Claims

In *NTP*, the Federal Circuit evaluated whether a method for integrating an electronic mail system with RF communication networks was infringed under the "use" category of § 271.[4] Use of RIM's e-mail system for BlackBerry devices, which incorporated a relay located in Canada to route e-mails to the recipient, allegedly infringed the asserted method claims.[5] RIM argued that, because a portion of the method was performed by the relay located in Canada, the method was not "used" within the United States.[6] The Federal Circuit agreed, stating that "[b]ecause a process is nothing more than the sequence of actions of which it is comprised, the use of a process necessarily involves doing or performing each of the steps recited. This is unlike use of a system as a whole, in which the components are used collectively, not individually."[7] Accordingly, the Federal Circuit held that RIM did not infringe the method claims.[8] Since *NTP*, the Federal Circuit has confirmed the reasoning that each step of a method claim of a U.S. patent must be performed within the United States to be infringed.[9]

In performing its analysis, the court noted that Congress has expressed the view that method claims can only be infringed under the "use" category of infringement, and held that RIM had not sold, offered for sale, or imported the entirety of the method.[10] However, the court made sure to leave open the possibility that a method might be infringed under other categories of infringement outlined in 35 U.S.C. § 271(a) (e.g., making, offering to sell, importing) or under different factual circumstances.[11]

In view of these considerations, patent practitioners should strive to draft method claims for software inventions from a perspective of a single device or component in a system. This device or component would ideally be that which is most likely to be located in the United States. In many cases this will be an end-user device. For example, in *NTP* the method claims would have been infringed if each step of the claimed process had been performed on a BlackBerry. However, in other instances, a patentable idea for a software invention necessarily involves interactions of multiple components in a system. In these instances, a patent practitioner should focus on a central component of a corresponding system that produces the useful output.

Software-related patents that claim a method should also provide a description of the steps performed in the method, such as by referring to a block diagram. The block diagram allows the practitioner to provide a tangible representation of the functions performed by the claimed software. A description of the block diagram should make it clear which components of a system can perform each step. In ideal scenarios for purposes of drafting software method claims, the practitioner can identify a single component that is capable of performing each step, while still describing embodiments where different steps can be performed by different components.

System Claims

Though the Federal Circuit found that the method claims were not infringed in *NTP*, the court reached a different result with regard to the asserted system claims. RIM argued that the foreign relay was necessary for other components of the system to function

properly, and so any "use" of the system as a whole would not be in the United States.[12] But the court relied on controlling precedent to contradict this reasoning. The court found that the situs of a system is not the place where the entire system resides, but is rather "the place where control of the system is exercised and beneficial use of the system is obtained."[13] Thus, because BlackBerry owners used their devices to send and receive e-mails within the United States, the system was used within the United States for purposes of § 271. So, unlike method claims, which must be performed in their entirety in the United States to be "used," system claims of a U.S. patent may still be infringed where one or more components exist outside the boundaries of the United States.

Accordingly, it is less critical for system claims to recite a single component capable of performing each function of a software program. But the result in *NTP* does not imply that software-related system claims should be drafted carelessly. Such claims should focus on the components where a useful result is obtained. If, for example, the Federal Circuit had been convinced that the beneficial use of the claimed system was achieved by the foreign relay, it is unlikely that the system claims would have been found infringed.

Thus, as with method claims, it is worthwhile for practitioners to describe one or more block diagrams of software-related system components. This allows an opportunity to describe which components perform essential functions of the claimed software. In addition, such a description will often serve as a precursor to a block diagram for a method claim, and can include a memory and one or more processors that can execute software instructions stored on the memory to perform the method. By describing the system in this way, a practitioner can tie the system and method claims together, and clarify which components perform which functions. For example, a central component to the system may dictate the steps performed in the method, perhaps because that component performs steps that are patentably distinct from other software inventions.

Computer-Readable Medium Claims

CRM claims combine the functionality of method claims with the tangibility of apparatus claims: they recite operations typically provided in a method while being directed to a physical memory having instructions that are executable to cause such operations. Accordingly, whereas it is uncertain whether a method can be "sold," "offered for sale," or "imported" for purposes of infringement under § 271, the Federal Circuit has held that CRMs can be. For example, in *Finjan v. Secure Computing Corp.*, the Federal Circuit affirmed that the defendant infringed the plaintiff's CRM claims because the defendant had "sold" an infringing software product.[14] And while each step of a method must actually be performed in the United States to be infringed, the court in *Finjan* did not require that the instructions stored in the infringing CRM actually be executed. The court reasoned that, "to infringe a claim that recites capability and not actual operation, an accused device 'need only be capable of operating' in the described mode."[15] Thus, CRM claims can operate like apparatus claims for purposes of an infringement analysis.

Accordingly, CRM claims are highly valuable in a software patent infringement context. A claimed CRM might ultimately be a memory installed in an end-user device, which provides further incentive to claim the method from the perspective of a single component. Where a claimed CRM is installed on an end-user device, the CRM claim has been infringed, even where the end-user device has never been used.

Because patent applicants are allowed three independent claims before paying a fee,[16] practitioners drafting a software-related patent should craft claim sets that cover independent method, system, and CRM claims directed to the same invention to take advantage of the different standards of infringement. The method and system claims can be drafted differently based on these infringement considerations. And dependent claims can also be drafted in accordance with these differences in infringement standards. For instance, dependent method claims can be drafted from the perspective of a single component, while claims that depend from an independent system claim might incorporate additional components and functions thereof. Further, though CRM claims will generally mirror the features of a method claim, there is less concern with dependent CRM claims incorporating features related to other components in the corresponding system.

In sum, the varying standards for infringement of software-related patent claims have practical implications that should affect strategy when drafting a patent, particularly when drafting a set of claims. Patent practitioners should be aware of which devices or multi-component systems are likely to infringe a patent, and mold the figures, written description, and claims in a way that allows the standards for infringement to work for, and not against, the client's needs.

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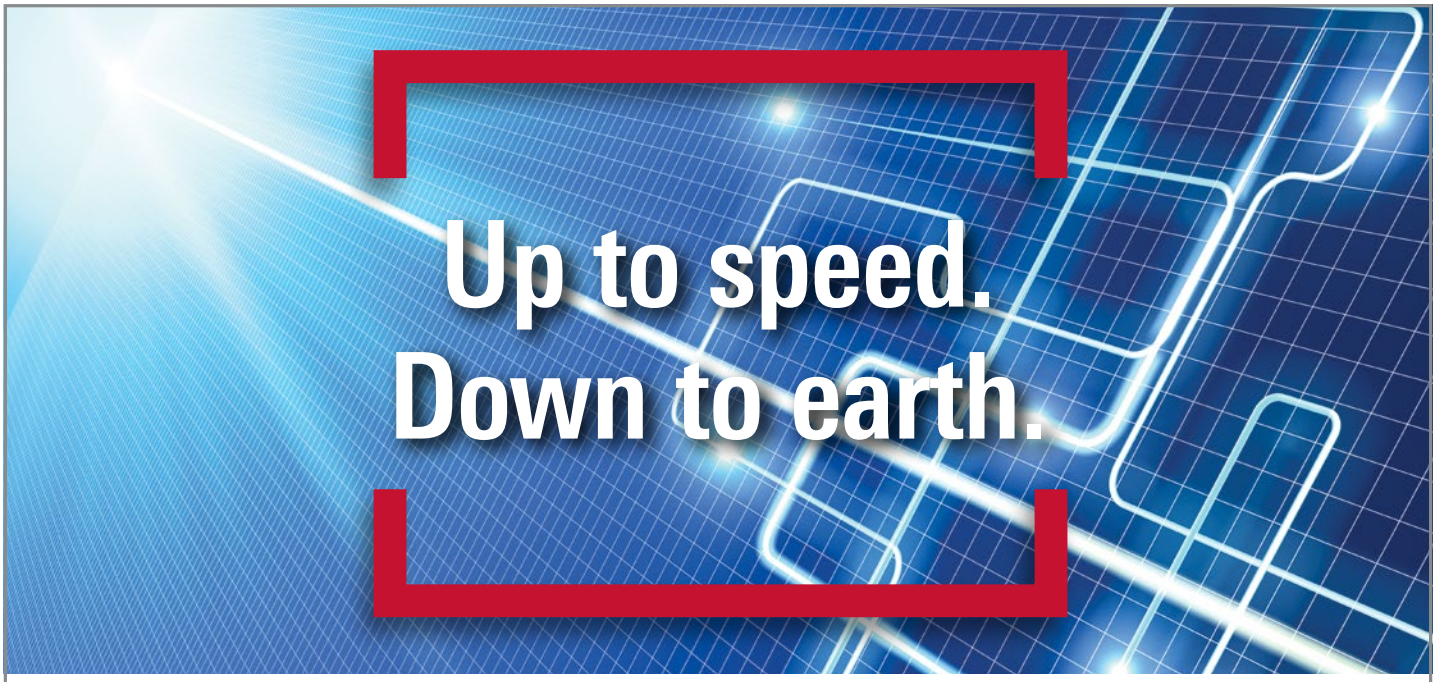
Endnotes

1 35 U.S.C. § 271(a).
2 NTP, Inc. v. Research In Motion, Ltd., 418 F.3d 1282, 1316 (Fed. Cir. 2005) (citing Minton v. Nat'l Ass'n of Sec. Dealers, Inc., 336 F.3d 1373, 1378 (Fed. Cir. 2003)).
3 *Id.* at 1316-24.
4 *Id.* at 1317-18.
5 *Id.* at 1289-90.
6 *Id.* at 1317.
7 *Id.* at 1318.
8 *Id.*
9 *See, e.g.,* Meyer Intellectual Properties Ltd. v. Bodum Inc., 690 F.3d 1354 (Fed. Cir. 2012).
10 *NTP*, 418 F.3d at 1319.
11 *Id.* at 1320-21.
12 *Id.* at 1317.
13 *Id.* (citing Decca Ltd. v. United States, 544 F.2d 1070, 1083 (1976)); *see also* Intellectual Ventures I LLC v. Motorola Mobility LLC, 870 F.3d 1320 (Fed. Cir. 2017) (confirming the Federal Circuit's analysis of system claims in NTP).
14 Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197 (Fed. Cir. 2010).
15 *Id.* at 1204 (quoting Intel Corp. v. U.S. Int'l Trade Comm'n, 946 F.2d 821, 832 (Fed. Cir. 1991)).
16 *See* 37 C.F.R. § 1.16(h).



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