

Outside Counsel

Expert Analysis

Patent Infringement and Systems Claims in the Information Age

In an era in which computer systems and information technologies are increasingly common occurrences in everyday life, it is no surprise that the U.S. Patent Office receives a large number of patent applications with claims directed to systems that implement these technologies. These computer systems are assemblies of numerous components that may or may not be physically in contact with one another, but that if they satisfy the standards of patentability, including being useful, novel and non-obvious, can and frequently do receive patent protection.

Because of the importance of these industries in the 21st century economy, patent practitioners have over the years become familiar with both drafting and construing claims directed to them. However, because a claimed system may be directed to a combination of components that are part of the same system only because of the movement of information among them, and physical control of these components may be vested in two or more different people, enforcement of a patent claim directed to a system can present unique challenges.

Elements common to systems claims are often one or more of the following: a processor, an input device, an output device, a communications device, a data processor and a memory. Because of the ease of transporting information over large distances, in many implementations of systems covered by patent claims, no one person or entity has physical control over all of these elements. This has led to an issue as to who the system “user” is and thus who would be a direct infringer of any patent that claims such a system.

The U.S. Court of Appeals for the Federal Circuit (CAFC) recently confronted this issue in *Centillion Data Systems, LLC v. Qwest*¹ in which the



By
**David A.
Kalow**



And
**Milton
Springut**

patent at issue disclosed a system for collecting, processing and delivering information from a service provider, such as a telephone company, to a customer. As with many systems, part of the claimed system involved a front-end personal computer maintained by an end user and part involved a back-end computer controlled by a

Are there any direct infringers if no one controls all the components of a claimed system?

service provider. Accordingly, the CAFC was left to address who, if anyone, would be a user of the system and thus, who could potentially be held liable for infringement. As an increasing number of businesses use systems that are patented, try to patent systems, and try to avoid the patents of third parties that are directed to various systems, it is important for the attorneys who counsel them to be cognizant of both the CAFC's holding and reasoning in *Centillion*.

Methods or Systems Claims

U.S. patent law is clear that anyone who, without authority, makes, uses, offers to sell or sells a patented invention during the term of a patent infringes that patent.² In order to prove infringement, a patent holder must show that

an allegedly infringing activity meets all of the elements of a patent claim, either literally or under the doctrine of equivalents.³

Infringement of a patent can be either direct or indirect.⁴ Indirect infringement occurs when there is either inducement of infringement or contributory infringement.⁵ From a patent holder's perspective, it is preferable to pursue a claim of direct infringement. In order to prove indirect infringement, one must first prove a predicate of direct infringement. Then, for inducement of infringement, one must prove specific intent; and to prove contributory infringement, one must prove mens rea and liability is limited to sales of components or materials without substantial non-infringing uses.⁶

When a patent is directed to a product, it is relatively easy to identify who is making or using the product, but when there are methods or systems claims, the question can become more difficult. These types of claims can have many steps or features and it is possible for multiple parties to perform fewer than all of the steps or features.

Almost a decade ago, in *BMC v. Paymentech, L.P.*,⁷ the CAFC addressed the issue of the proper standard for joint infringement by multiple parties of a single method claim.⁸ The way that the claims in the patent-in-suit were drafted, four parties were needed to perform all of the different steps. However, rather than holding the four parties each potentially liable, the CAFC noted that BMC did not structure a claim to capture infringements by a single party; rather, it chose to draft the claims as it did.⁹ Accordingly, because the defendant did not perform all of the method steps, it was not liable as a direct infringer.

Centillion was an opportunity for the CAFC to maintain doctrinal consistency and apply *BMC* to systems claims by holding that a user of the system needed to have physical control of all aspects of the system. Thus, it could have taken the position that an applicant who chooses to draft its systems claims such that different components are under

DAVID A. KALOW and MILTON SPRINGUT are partners at Kalow & Springut. SCOTT D. LOCKE, a partner at the firm, assisted in the preparation of this article.

the control of different parties, runs the risk of not being able to find direct infringers. However, the CAFC deciding otherwise, went in another direction. Instead of extending *BMC* as far as it possibly could, the CAFC examined the definition of “use” in the patent statute section defining direct infringement, §271(a), and its application to vicarious liability and direct infringers when the claims are system claims.

In *Centillion*, the patent holder argued, under *NTP Inc. v. Research in Motion, Ltd.*,¹⁰ that Qwest’s customers put the claimed system into service when the service was engaged for its intended purpose. Thus, although the customers did not have physical control over all elements of the system, the customers set the elements of the system in motion for their intended purpose. By contrast, Qwest argued that the customers did not use the system because they did not control the back-end processing.

Qwest’s system operated in two ways: (1) an on-demand function, where the customer seeks particular information by creating a query and sending it to Qwest and Qwest’s back-end system processed and prepared information for download to the customer; and (2) a standard operation download function in which after a user subscribes, Qwest’s back-end system created periodic summary reports that are available for download.¹¹

Court’s Distinction

The CAFC agreed with the patent holder and drew upon its decision in *NTP*. In *NTP*, the CAFC addressed whether a use by a customer of an entire system amounted to a use within the United States. The CAFC then emphasized a distinction between a claimed method and a claimed system noting that the use of a claimed system occurs at the location at which the system as a whole was put into service and not where the individual steps are carried out. Thus, according to the CAFC, it is the location where control over the system is exercised and the benefits are obtained.¹² Accordingly, the court emphasized that in *NTP* it previously held that there was liability for U.S. customers who sent messages via the accused product because they used the overall system, and their location was in the United States.

Drawing upon *NTP*, the CAFC held the fact that *NTP* dealt with the situs of the use and not the definition of “use” was irrelevant.¹³ Instead, the CAFC reasoned that direct infringement by use of a systems claim requires a party to use each and every element of the system, and that to put the system into service an end user must

use all portions of the claimed invention.¹⁴ But, as *NTP* provided, the end user did not need to have physical control over the relays, so long as the end user made them work for their intended purpose.¹⁵

Applying this standard to the case, the CAFC held that as a matter of law, both iterations of Qwest’s system were “uses” within 35 U.S.C. §271(a). With respect to the “on-demand” operation, the CAFC emphasized that the customer put the system into service and benefited from it each time that it requested information.¹⁶ Thus, that the back-end processing was physically under the control of Qwest was irrelevant.¹⁷ With respect to the standard operation, the CAFC emphasized that its main difference from the on-demand system was that after subscribing, the reports came automatically. However, because the customer set the subscription into motion, the distinction made no difference.¹⁸

The CAFC, by setting up different standards for methods and systems claims, has invited patent prosecutors to pursue both methods and systems claims directed to the same invention because for a customer performing the same act, it may be an infringer of a systems but not a method claim.

After addressing whether Qwest’s customers could “use” the system, the court asked whether Qwest itself could be a system user. Here the CAFC sided with Qwest, noting that although Qwest made the back-end processing elements, it did not use the entire claimed system because it did not put into service the personal computer data processing means.¹⁹ The CAFC also held that Qwest could not be vicariously liable for the actions of its customers because it did not direct them to act as their agents.²⁰

In view of *Centillion*, the practitioner who counsels clients in the computer and information technology industries should be mindful that if improperly drafted, the client’s patents directed to systems might not be available for them to sue their competitors. Instead, they may be forced to prove direct infringement against their competitors’ customers.

Thus, the CAFC’s warning in *BMC* that more careful attention should be paid to prosecution is certainly good advice. However and more importantly, the CAFC, by setting up different standards for methods and systems claims,

has invited patent prosecutors to pursue both methods and systems claims directed to the same invention because for a customer performing the same act, it may be an infringer of a systems but not a method claim. Additionally, in order to pursue claims against competitors and not only their customers, patent applicants should draft other claims so that the competitor also completes all of the steps or controls all of the features.

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1. 2010-2220, 1131 (Fed. Cir. Jan. 20, 2011) (slip opinion)
2. 35 U.S.C. § 271(a).
3. *Roche Palo Alto LLC v. Apotex, Inc.*, 531 F.3d 1372, 1377 (Fed. Cir. 2008).
4. *Mee v. Dow Chem.*, 608 F.3d 1202, 1212 (Fed. Cir. 2010).
5. *Id.*
6. *BMC v. Paymentech*, 498 F.3d 1373, 1381 (Fed. Cir. 2002).
7. 498 F.3d 1373 (Fed. Cir. 2007).
8. *Id.* at 1377.
9. *Id.* at 1381.
10. 418 F.3d 1382 (Fed. Cir. 2005).
11. *Id.* at 9-10.
12. *Id.* at 1317.
13. *Centillion* at 8.
14. *Id.*
15. *Id.* at 8-9.
16. *Id.* at 10.
17. *Id.*
18. *Id.* at 11.
19. *Id.* at 12-13.
20. *Id.* at 14.