

Defining the scope of US patents

A recent ruling by a US court has triggered a debate about worldwide computer and communication systems and the reach of US patents. **John Kenny** and **Sascha Schalkwijk** examine the arguments behind the celebrated Blackberry case

In a recent opinion that could affect companies using communication and computer systems that cross national boundaries and patent owners, the Court of Appeals for the Federal Circuit addressed the territorial limits of US patents. The case, *NTP Inc v Research In Motion Ltd*, was decided on December 14 2004.

NTP is a Virginia-based company with patents directed to the integration of email systems with wireless networks. Research In Motion (RIM) is a Canadian company that operates the Blackberry system, which integrates email systems with wireless communication networks. A key component of the Blackberry system, the Blackberry Relay, is located in Canada. The Federal Circuit nevertheless held that the use of the Blackberry system by US Blackberry customers infringed NTP's US patents.

The Blackberry system

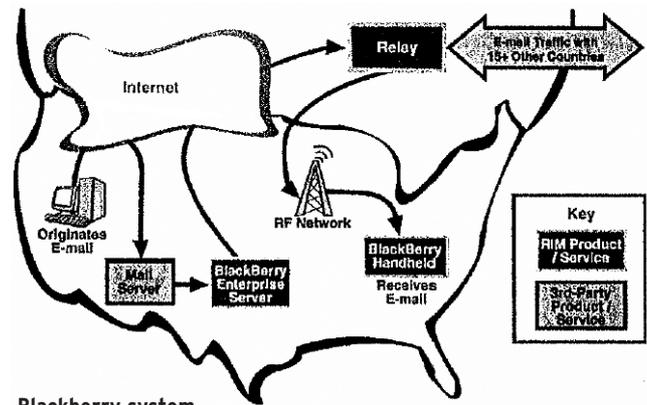
In operation, the Blackberry system allows users to receive emails without physically accessing a computer. The system is illustrated in the figure to the right, which was submitted to the Federal Circuit by RIM.

A user of the Blackberry system (or the user's organization or company) installs Blackberry's re-director software on a computer with access to the user's email (for instance an email server). The re-director software monitors the computer for new email messages; when it finds them, it copies the messages, encrypts them and routes them to the Blackberry Relay. The Relay translates the messages and routes them to a partner's wireless network, which then delivers them to the Blackberry handheld unit. According to NTP, RIM has received more than \$1.5 billion in revenue from Blackberry-related US sales.

As illustrated, the Blackberry Relay is located in Canada, but for US customers, all other Blackberry components are in the US. NTP's patents claim systems and methods with an interface or interface switch. The only Blackberry component that acts as the claimed interface or interface switch is the Relay. RIM argued that the Canadian locus of the Relay prevents the Blackberry system from infringing NTP's US patents.

The litigation

RIM first presented this territorial argument to the federal district court in Richmond, Virginia, where the case was tried. The district court initially indicated that if the Relay was exclusively in Canada then there could not be infringement under a particular paragraph of the patent code. But the district court did



Blackberry system

not grant summary judgment in RIM's favour, because there was a factual dispute as to whether the Relay was exclusively in Canada. The district court subsequently changed its mind on the territorial issue and held that the Blackberry system is subject to US patents regardless of the Relay's location. The district court instructed the trial jury that the location of the Relay did not matter.

At trial, the jury found that the Blackberry system infringed NTP's patents. The district court subsequently awarded NTP a total of \$53.7 million – \$33.4 million for compensatory fees, \$4.2 million for attorney fees, \$2 million for prejudgment interest, and \$14 million for enhanced damages. The district court entered judgment against RIM, and permanently enjoined any future infringement by RIM, but stayed its injunction pending RIM's appeal to the Federal Circuit.

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The appeal

On appeal, NTP no longer contested RIM's argument that the Blackberry Relay operated exclusively in Canada. Thus, the Federal Circuit had to decide whether a system with a component abroad (the Relay) could infringe a US patent. The Federal Circuit noted that the issue of whether alleged infringement occurs in the US is generally straightforward. This case was more complicated because (1) NTP's patents were not directed to a single device, but rather a system comprising multiple components and (2) the nature of those components permits their function and use to be separated from their physical location.

The Federal Circuit resolved the issue by looking at the location of the Blackberry customers and their purchases. The court stated that the customers' location and their purchase of the Blackberry devices establish control and beneficial use of the Blackberry system within the US. Thus, the Blackberry system is subject to US patents.

In addition, the Federal Circuit addressed issues of patent claim construction, upholding all but one of the district court's constructions of claim terms in the NTP patents. The Federal

ferential application of the US patent statute and improper, extraterritorial application of US patent laws.

In response, NTP argued that no company would relocate its operations to the US because of the opinion, since moving to the US would not avoid the use of the company's system in the US. NTP also argued that if the Federal Circuit had ruled otherwise, essentially all US patents on computer systems, communications systems and business methods would be rendered valueless, because one could simply

locate one node of a computer system in a foreign country and escape the patents of both the US and that foreign country. NTP further asserted that the Canadian government had a financial stake in RIM.

The Canadian Chamber of Commerce argued that the Federal Circuit's opinion undermined the cer-

tainty its members had regarding the extraterritoriality of US patents. According to the Chamber, before this decision, the law was clear that conduct taking place at least partially outside the US would not support a claim for infringement unless the US Congress clearly and certainly signalled its intent for such conduct. The Chamber argued that the panel's reliance on "control and beneficial use" creates uncertainty in its application. In response, NTP argued that due to innovations in information technology, the location of any individual node in a computer network is purely secondary. The location of infringement must necessarily focus on the beneficial use and function of the whole operable system; otherwise, there would be no patent coverage under any patent laws.

The Information Technology Association of Canada (ITAC) argued that the Federal Circuit's opinion contradicts principles of international law and creates uncertainty regarding the reach of US patents. EarthLink asserted that it should be up to the US Congress, not the courts, to decide the extraterritorial effect of US patents regarding internet-based systems and services. NTP disagreed with ITAC's and EarthLink's assertions and noted the close relationship between those parties and RIM. RIM is a member of ITAC, and EarthLink is a Blackberry wireless partner.

Further proceedings

As of the date this article was written, the Federal Circuit had not indicated whether it will grant RIM's petition. Such petitions are, more often than not, denied. Because of the international impact of the opinion, the Federal Circuit might be more willing to consider rehearing this appeal than others. The Federal Circuit has issued an errata sheet correcting a mistake in the opinion identified in RIM's petition.

If the Federal Circuit denies RIM's petition or grants the petition but leaves the opinion unmodified, NTP can petition the US Supreme Court for review. Such petitions are not often granted. The Supreme Court may, however, decide that the territorial nature of the issue merits consideration. On

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Circuit remanded the case to the district court to determine whether and to what extent the construction that the Federal Circuit modified affects the district court's \$53.7 million award or the scope of the district court's injunction. The Federal Circuit's opinion was rendered by a unanimous three-judge panel.

The petition to rehear the appeal

RIM has petitioned the Federal Circuit to either have the three-judge panel rehear the appeal or to have the Federal Circuit rehear the appeal *en banc*, wherein all active judges of the Federal Circuit would collectively decide the issue. NTP has opposed the petition.

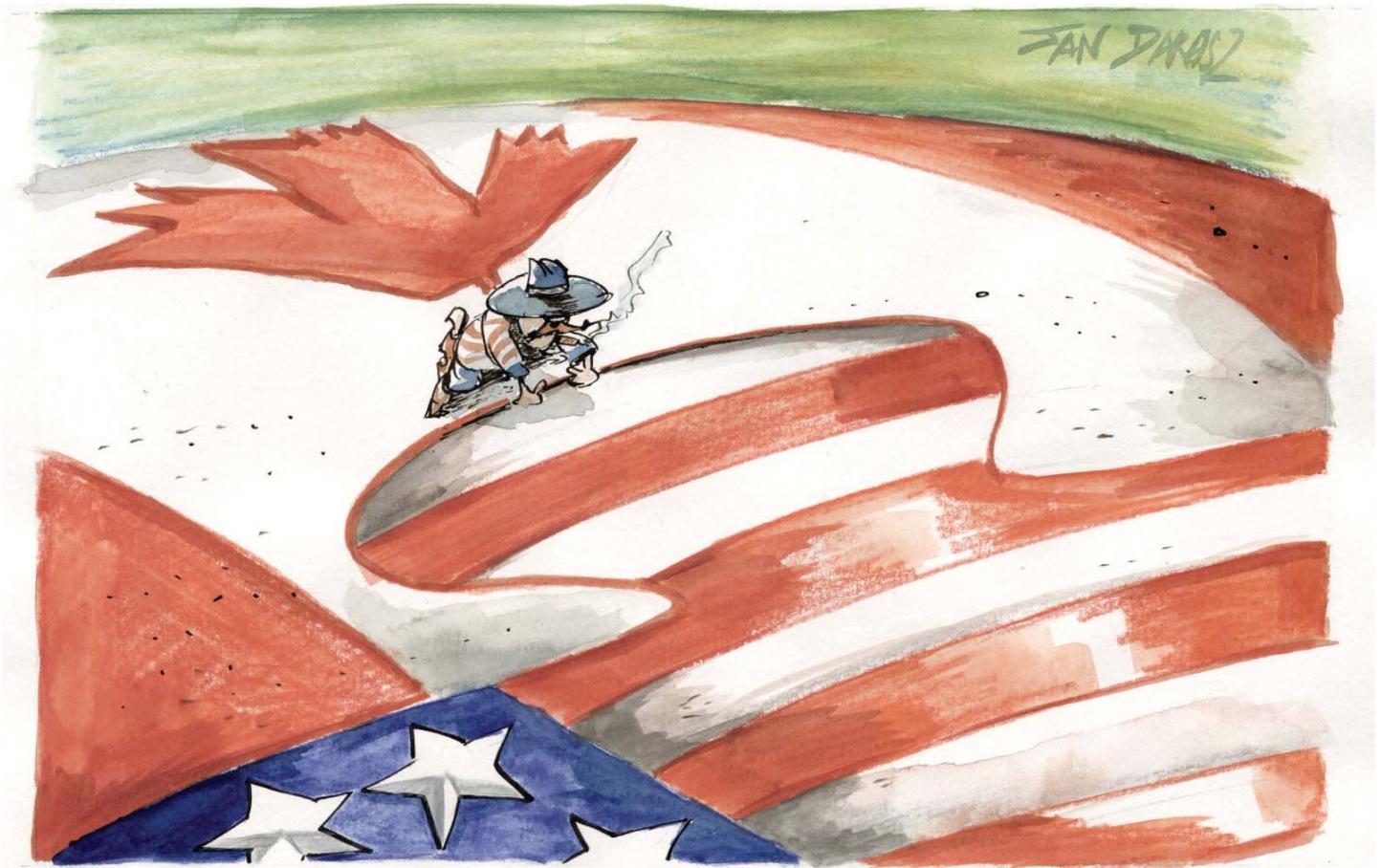
The government of Canada, the Canadian Chamber of Commerce, the Information Technology Association of Canada and EarthLink all submitted briefs in support of RIM's petition. The Canadian government argued that the panel's decision could have unfortunate and unintended consequences affecting Canadian companies with multi-jurisdictional operations, that it could chill innovation in Canada, undermine Canada's IP laws, and lead to inappropriate, dif-

Earlier cases on territorial bounds

The Federal Circuit's opinion in *NTP Inc v Research In Motion Ltd* interpreted earlier cases on the territorial limits of US patents. The seminal case was the 1972 US Supreme Court opinion, *Deepsouth Packaging Co v Laitram Corp*, which cautioned against interpreting the patent code so as to give it extraterritorial effect. In *Deepsouth*, the patentee Laitram established that Deepsouth's machines to de-vein shrimp infringed Laitram's US patents. The district court enjoined Deepsouth from selling its machines in the US. Deepsouth sought judicial approval, however, to sell in the US all unassembled parts for its machines for assembly abroad. Assembly required about one hour. The Supreme Court ruled in favour of Deepsouth, holding that the export of the unassembled machine parts would not infringe Laitram's US machine patents.

The Federal Circuit distinguished *Deepsouth* noting that the use of the patented invention in *Deepsouth* (the use of the machine) was in a foreign country, whereas the beneficial use of the Blackberry system was in the US.

The Federal Circuit held that the issues concerning the Blackberry system were very similar to those for the Omega system, which was the subject of the 1976 US Court of Claims opinion, *Decca Ltd v United States*. The Omega system was used by the US government for global positioning of ships and aircraft. The system had a master control station located in the US and a transmitter station in Norway. Decca argued that the system infringed its US patent. The US government argued that the Norwegian transmitter station prevented a finding of US infringement. The Court of Claims agreed with Decca.



the other hand, the Supreme Court may want to allow more case law to develop in the lower courts before deciding the issue. Congress could address the issue legislatively. Twelve years after the Supreme Court decided *Deepsouth* (see box), Congress modified the US patent code to make the export from the US of all parts of a patented invention for assembly abroad an act of infringement.

If the Federal Circuit's opinion remains unaltered, and the parties do not settle their dispute, the case will be remanded to the district court in Richmond to determine whether and to what extent the district court's damage award and the scope of the injunction need to be altered in light of the Federal Circuit's claim construction.

Given the widespread use of multinational computer and com-

munication networks, there will undoubtedly be further cases addressing and refining the precedence set forth by this case.

The Supreme Court may decide that the territorial nature of the issue merits consideration



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