

Memo

TO: John Fisher, Chair, Signals Technical Committee, NCUTCD
FROM: Andrew Cooley & Brian Augenthaler
DATE: January 16, 2018
RE: RRFB Patent Dispute

Introduction and Summary

In June 2008, the Signals Technical Committee (STC) voted to endorse the Rectangular Rapid Flashing Beacon (RRFB) for inclusion in the Manual on Uniform Traffic Control Devices (MUTCD). In July 2008, the FHWA granted Interim Approval for agencies to install RRFB crossing assemblies. In approximately 2011, the FHWA learned that patent rights were being asserted against manufacturers of the RRFB assemblies. In December 2018, the FHWA terminated the interim approval.

We have agreed to examine the patent issue for the Committee. It is important to note, that we are not offering any opinion about the validity of the asserted patents. We do not want to be accused of inducing a potential patent infringement.¹

In summary, the asserted patents are being disputed by every RRFB manufacturer, except the Tapco Company. It may have purchased a license from Jones. The current suits are on hold, while the Defendant Manufacturers ask the Patent Office to reexamine the 4 current patent claims and the single pending patent application. It will take upwards of 3 years to resolve the claims. The manufactures believe they will prevail. There is a possibility that the manufacturers will collectively settle, purchase the patents from the current holder, and then disclaim the patents in a manner that would satisfy the FHWA (*i.e.*, allow unfettered manufacturing/distribution of the RRFB assemblies).

¹ This is not to suggest the patent is valid or infringed but merely to communicate that we are not advocating a course that could be construed as an invitation to ignore the presence of the asserted patents.

It is our opinion that experiments with different shapes (a “triangular” rapid flashing beacon) would face the same patent challenge. It is our opinion that experiments with other flash patterns would also likely face the claim that they are covered by the existing patents. Again, this is not said to suggest that it is our opinion that other flash patterns *are* covered but only that this change would likely result in further lawsuits by Jones.

Background of Patent Law

A patent is a specie of intellectual property, like a copyright. A patent provides, from a legal standpoint, the right to exclude others from making, using, selling, offering for sale, or importing the patented invention for the term of the patent, which is usually 20 years from the filing date.

Patent law recognizes a concept called “prior art.” Prior art is the concept that an invention cannot be patented if it consists of an invention that was already publicly known. It can be prior art due to a prior patent, or prior art due to widespread use. For example, no one could patent the Stop sign, because it would violate the prior art rule. Parties that submit a patent application are required to attest that they have conducted a search for prior art.

In addition to a description of the patented device, a patent must contain “claims.” The claims describe the breadth of the patent. Courts often use the analogy to the way that land is plotted through a description of the metes and bounds. The contours of the patent are important. A patent that is so broad that it encompasses prior art, will be invalid. A patent that is too narrow will be evaded. It is sometimes said that the claims must be “just right.”

If a patent is granted by the United States Patent and Trademark Office (USPTO), it is presumed valid.

A patent is typically enforced through the federal civil courts. Parties can seek an injunction in federal court. They can also seek damages. An injunction will be a court order to cease violating the patent (by making and selling a patented device), and can be granted where there is an emergency and damages will not be satisfactory.

A patent can be challenged in the courts. A suit can be brought by the patent holder to enforce the patent and seek damages. Or suit could be brought by

someone who believes the mere threat of a patent suit violates their rights. That kind of suit would seek a declaration from the Court that the patent is invalid or does not cover a particular product.

A case can result in a jury trial, where a jury would decide the validity of the patent. That jury could also award damages. Such proceedings are costly and time consuming. Even after a jury has ruled on the patent, the parties can appeal. A jury finding that a patent is invalid does not have legal effect until the appeal is concluded. The time from filing a lawsuit to final conclusion will be upwards of 3 years or more.

A patent can also be challenged at the USPTO. This is called a reexamination. A request for a reexamination can be filed by anyone during the period of enforceability of a patent. To request a reexamination, one must submit a "request for reexamination," pay a substantial fee, and provide an explanation of the new reasons why the patent is invalid based on prior art. Copies of the prior art must be provided, and the party making the request has to let the owner of the patent know that a request has been filed. If the USPTO finds that the request indeed raises a substantial new question of patentability, the USPTO orders a reexamination.

Requests for reexamination are often filed by third parties, who are already involved in an infringement lawsuit concerning the patent at issue. By filing for a reexamination, such parties seek to invalidate the patent while keeping legal fees low. If the judge agrees, the trial proceedings may be put on hold pending the outcome of the reexamination.

If a patent is reexamined and declared invalid, the owner can appeal that decision to the Federal Court of Appeals for the District of Columbia. Until this appeal is concluded, the patent remains enforceable and presumed valid.

There are two widely reported examples of patent reexamination that led to rejection. U.S. Patent 6,368,227 entitled "Method of swinging on a swing" was issued in 2002 to applicant Steven Olson, the young son of a patent attorney who applied for the patent to teach his son about the patent system. The patent claimed an improved method for a child to swing on a swing.

The PTO director ordered a reexamination, and the claims were subsequently rejected. The patent owner elected not to appeal. A reexamination

certificate was issued canceling all the claims.

U.S. Patent 6,004,596 entitled "Sealed crustless sandwich" was issued in 1999. The patent claimed an improved crustless peanut butter and jelly sandwich, which could be mass-produced and sold in stores.

This patent has been widely ridiculed in the media as an example of an obvious invention, which should never have been granted a patent.

The patent was licensed to Smuckers, which then introduced the Uncrustables brand of frozen no-crust sandwiches. To enforce the patent, Smuckers filed a patent infringement lawsuit against alleged infringer, Albie's Foods. Albie's Foods responded by filing a request for ex parte reexamination.

The examiner rejected the claims in the patent. In 2008 the patent lapsed due to the patent owner not paying the renewal fee.

The Jones' Patents

As stated earlier, we take no position on the validity of the patents held by Richard Jones. Jones has received 4 patents that he argues cover the RRFB assembly. He has one patent application pending. The patents cover a variety of flash pattern that could be generically described as a wig-wag or stutter flash pattern. Jones has patented a pattern where the LED light flashes 2 times on one side's housing and then 3 on the other housing. He has patented patterns covering 2-4 and 2-5 flash patterns. He asserts that he has also patented the fact of delay between the flash patterns. He has taken the position that the key to his pattern is the flash pattern and not the shape of the LED light housing. This leads us to conclude that he would challenge housings shaped as triangles or round.

Arguably the main patent is called #654. It was issued to Richard Jones on September 18, 2012. In that Patent, the USPTO indicates that it is a "continuation of application...filed June 6, 2007." It also indicates that there was a provisional application "filed on Jun. 6, 2006."

The Carmanah Litigation

In July 2013 Jones and his companies filed suit against Carmanah.

Carmanah had purchased a Nevada based company called Spot Devices during its bankruptcy in 2012. Carmanah was thereafter making and selling RRFB assemblies. While there are presently 8 lawsuits over the RRFB product, we examined in detail the Carmanah litigation.

In the Carmanah case, Jones and his companies sought an emergency injunction. Carmanah responded by noting that Jones knew Spot Devices was making RRFB assemblies for many months prior to the patent suit. He even visited the Spot Devices factory. The Court rejected the emergency injunction.

The Carmanah lawsuit contained the usual competing arguments. Carmanah noted that the initial FHWA approval for the RRFB experiment said there was no patent. Jones responded that he did not sign that form. Carmanah noted that there are lots of flashing light assemblies, for example the flashing LED lights on emergency vehicles. Jones responded that his patterns were different. Carmanah had their stable of experts that would say the flash pattern was nothing special. Jones had his to rebut.

Trial courts will not resolve these factual disputes but will allow a jury to hear these competing claims and decide who to believe. Of course, a jury trial like that is very expensive and has uncertainty for all parties. That is why most civil cases settle before trial.

That lawsuit is on hold while a re-examination takes place at the USPTO. The request for reexamination is based on the defendants' claims that the Jones patent is covered by prior art. They have discovered that several companies make LED light assemblies that flash. These are often used by emergency vehicles and on construction equipment. The manufacturers told us they submitted a 600 page analysis of the prior art argument.

We are unable to analyze the merits of the reexamination. Handicapping the manufacturers' success is beyond our competence. We do believe this will take time and it could be as long as 2-3 years.

Could The NCUTCD or Other Interested Parties Participate in Reexamination?

No, probably not. Ex parte re-examination is limited to the patent owner and the USPTO—even the third-party *requester* is precluded from intervening unless

the patent owner rebuts the requester's "substantial and new question of patentability," in which case the requester may respond. "Examiners should not discuss or answer inquiries from third parties (i.e., parties who are not the patent owner) in reexamination proceedings." *See* Manual of Patent Procedure, Chapter 2200, § 2212.