Determining who to name as an inventor on a US patent can sometimes be more difficult than expected, and mistakes in doing so can be costly.

Part of the process of filing an application for a US patent includes identifying the inventor or inventors of what’s to be patented, referred to as determining inventorship. This would appear to be an easy task—for example, you might think that the inventor is the person who wants the application filed, headed the research that led to the invention, or heads the company that owns the invention. But determining inventorship is more complex than that.

Over the years, there has been a significant amount of litigation involving the inventorship of US patents. In some cases, the litigation results because a person believes he or she was unjustly omitted from the list of inventors on a US patent. The omitted person feels slighted and wants the recognition of having his or her name on the patent. The motivation for pursuing litigation usually increases if the omitted person would get a financial benefit from being named as an inventor.

Inventors have significant control over their US patents. Without an agreement to assign their automatic ownership of a patent to another, such as an employer, each named inventor can independently dictate how the patent can be used. This can create problems if the named inventors disagree on how to exploit the patent.

For an expanded discussion on this topic, visit the IEEE Computer Society’s website for the podcast that accompanies this column: www.computer.org/portal/web/computingnow/computing-and-the-law.

WHAT IS INVENTORSHIP?
The courts have defined inventorship in terms of the “conception” of an invention. In 1998, the US Court of Appeals for the Federal Circuit decided in Ethicon, Inc. v. United States Surgical Corp. that “conception is the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice. An idea is sufficiently definite and permanent when only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.” Therefore, according to US law, the person or persons who “conceive” an invention are the inventors.

The next question, then, is “What’s the invention?” US patent law defines that as well. The invention is what the claims in the patent describe. Although US patents include many sections that summarize, describe, and depict the invention, the critical section appears at the end of each patent. This is where one or more numbered claims appear that specify the invention in exacting legal language. Patent litigators analyze the claims, scrutinizing and arguing over them extensively to determine whether there’s an infringement.

Putting this together means that to be an inventor, a person must contribute to the conception of the claimed subject matter. That might sound simple, but it isn’t.

A patent attorney usually prepares the first set of draft claims for review by those involved with the invention. Part of that review should
include a candid discussion about what each claim covers and who had an active role in coming up with what’s in the claim. This discussion can be delicate—egos sometimes take center stage. Also, persons in leadership positions might insist that they be named as inventors as a matter of protocol.

The bottom line is that each person who conceived anything that’s claimed is an inventor. The discussion must avoid straying from the legal principles that define inventorship because doing so could put the patent that ultimately issues at risk of being found invalid or unenforceable.

In the US, it usually takes several years to obtain a patent after filing the application. During that time—known as prosecution in patent parlance—the US Patent and Trademark Office and the patent attorney engage in back and forth written exchanges over the patentability of the claimed invention. The Patent Office issues Office Actions that reject the claims, and the patent attorney files amendments in response to either modify the claims or raise counterarguments to the Patent Office’s position.

Inventorship comes into play when the amendments are filed. If the patent attorney needs to change, remove, or add one or more claims, the inventorship could change. For example, adding a new claim that covers another feature not previously included in the claims might require adding a new inventor who conceived that feature. Conversely, removing a claim might result in removing an inventor whose only contribution was to the now-removed claim.

It’s important to keep in mind that inventorship isn’t static while prosecution is ongoing. The inventors named when a patent application is filed can change by the time the patent issues as a result of modifications to the claims. It’s incumbent on those involved in the prosecution of the application to not lose sight of this and confirm that inventorship is accurate. This can be done throughout prosecution, but it’s critical to revisit inventorship when the application is getting ready to issue as a patent.

**JOINT INVENTORSHIP**

Many US patents name more than one inventor. These patents illustrate the case of joint inventorship. In the absence of an agreement to the contrary, each named inventor has an undivided interest in the entire patent. In other words, they don’t have equal, partial shares in the patent. For example, three inventors wouldn’t each own one-third of a patent—each joint inventor has an equal ownership share in the entire patent. Furthermore, the order of the inventors’ names on the patent isn’t significant. However, the name listed first is in a larger typeface, and that might be an important issue for some inventors.

The Ethicon case makes clear that every inventor listed on the patent must have made a contribution to the conception of an invention that’s reflected in at least one claim in the patent. That’s a more rigorous standard compared to determining, for example, who can be named as a coauthor of a technical or scientific paper. Joint inventorship typically results from collaboration between two or more of the inventors on at least some aspect of the claimed invention.

Determining when there is collaboration that gives rise to joint inventorship can be difficult. This issue has been vigorously litigated in many cases. These disputes usually involve a party claiming to have been wrongfully omitted as a named inventor even though the claimant worked with the named inventor or inventors during a critical period. A common example occurs when a university obtains a patent naming one or more of its researchers as inventors but doesn’t name a former student who worked with those researchers and whose research contributed to at least one claim.

Sometimes collaboration can be readily apparent. In the university example, the omission of the former student might have been inadvertent—the passage of time might have dimmed recollections of the student’s contribution. A key factor, however, is that the former student and the researchers were working together.

Indeed, courts have taken the position that collaboration requires a degree of interaction between the omitted and named inventors. This includes cases in which the inventors coauthored papers or shared samples and data. In contrast, in a recent case, the Federal Circuit found no collaboration and no joint inventorship when the only connection between the parties was that the abstract of one party’s scientific paper was sent to the named inventor’s office by a third party on his own initiative.

**THE PERILS OF IMPROPER INVENTORSHIP**

In the early days of patent law, having the wrong inventors listed on a patent was generally fatal to that patent. In 1952, however, Congress added a new section to the patent statute. Section 256 provides a mechanism to correct the inventorship of an issued US patent. In instances of “nonjoinder” (where a person is seeking to be added as
an inventor) or “misjoinder” (where a person is to be removed as an inventor), section 256 authorizes the Patent Office to change the inventorship. For this to apply, all of the parties must agree to the change and state that no deceptive intent caused the error in naming the inventors.

If the parties don’t agree, the person seeking the change can file a lawsuit under section 256 and ask a federal judge to order the Patent Office to make the change. But because US patents are presumed to be valid and to have the correct inventorship when they’re issued, that person has the burden of demonstrating by “clear and convincing” evidence that the inventorship should change. This burden, while not as high as “beyond a reasonable doubt” that applies in criminal matters, still presents a significant hurdle.

If the parties agree, or if the judge orders it, the Patent Office will issue a Certificate of Correction to change the inventorship. This certificate is attached to the end of the patent and includes the names of added or removed inventors or both. The certificate becomes part of the official patent document.

**EFFECT ON LITIGATION**

Inventorship issues can have significant effects on patent litigation. For example, a party being sued for patent infringement might uncover during the discovery phase that a person who contributed to a claim isn’t named as an inventor on the patent. This makes the patent vulnerable to an attack on its validity. If the patent owner, who’s usually the plaintiff in a patent infringement lawsuit, can’t rectify this, the accused infringer—the defendant in the litigation—might be able to have the patent ruled invalid. That effectively ends the litigation in the accused infringer’s favor.

Because a named inventor has control over a patent, changes in inventorship can turn litigation upside down. Continuing with the last example, the defendant might exploit a contentious relationship between the omitted inventor and the patent owner. In particular, the defendant could help the omitted inventor get named as an inventor on the patent. If that succeeds, the formerly omitted inventor typically grants the defendant a license to the patent. At that point, the defendant is no longer an infringer, and the litigation ends. Of course, this tactic wouldn’t work if the omitted inventor was obligated to assign an ownership interest to the plaintiff or another who wouldn’t support the defendant.

**INTERFERENCE**

Sometimes determining inventorship involves assessing who was first to invent the claimed subject matter. The Patent Office has an “interference” procedure for doing this. An interference is an administrative action that has some hallmarks of a litigation. However, it’s conducted at the Patent Office, not in court.

An interference pits the inventors named on one patent application against the inventors named on another patent application or on an issued patent. It’s designed to resolve which inventors were the first to invent the claimed subject matter. A party who’s unhappy with the result of an interference can appeal the Patent Office’s decision in federal court.

The particulars of an interference are too numerous to cover in this column. However, it’s worth noting that interferences will likely disappear going forward because US patent law changed on 16 March 2013 from a “first to invent” system to a “first to file” system. Now, the persons eligible for a US patent will generally be those who filed their applications first, meaning that in most circumstances there won’t be any need to inquire into who invented first.

In the rare event that such an inquiry is needed, the Patent Office would likely handle it using its new “derivation” procedure. In that procedure, a patent applicant files a petition under oath in the Patent Office that specifically describes how another inventor named on an earlier filed application was told of the applicant’s invention and filed an application on it without authorization. The Patent Office’s Patent Trial and Appeal Board reviews the evidence, conducts a hearing, and issues a decision on whether the first applicant derived the invention from the second. If the Board concludes that there was a derivation, then the first applicant isn’t entitled to the associated patent.

Inventorship is a complex concept that all too commonly gets short shrift when patent applications are filed and prosecuted. Failing to name the proper inventors on a patent will have consequences. At minimum, the patent owner will need to spend time and money to correct mistakes that were probably avoidable. More significant consequences include a reversal of fortune in a patent litigation that ends a patent owner’s ability to enforce its patent and gives an infringer an ironclad defense. It’s important to work closely with your patent attorney to ensure that inventorship is correct so that you can avoid some unpleasant surprises in the future.

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