The following is intended as a guide to help determine who should be named as an inventor in a U.S. patent application. If you have questions about inventorship in connection with a particular application or patent, you should contact your patent attorney.

The concern that the sole or joint inventors are correctly identified in a patent application stems from the Patent Laws, which provide that the willful naming of an incorrect inventive entity constitutes grounds for invalidating any patent that may issue from the application. A mistake in the naming of inventors can be corrected, but only if it can be shown that the mistake occurred through error and without any deceptive intention on the part of the actual inventor(s). Because the Patent Laws provide for original ownership of patents in the names of the sole or joint inventors, the rights of an assignee or exclusive licensee can be clouded if less than all of the inventors were identified when patent rights are assigned or licensed. Thus, it is important to pay particular attention to inventorship issues, especially when preparing to file a patent application.

A patent application should name the person or persons who conceived the claimed invention. Multiple inventors should be named in a patent application if each contributed to the conception of the invention as set forth in at least one of the claims in the application. Because inventorship is claim-dependent, it can change during prosecution of an application when a claim is amended, added, or cancelled, requiring the list of named inventors to be adjusted. Individuals can be joint inventors of an invention when there has been some collaboration between them even though they did not physically work together or at the same time, did not make the same type or amount of contribution, or did not make a contribution to the subject matter of every claim of the application. However, people who merely apply their ordinary skill to assist the inventor(s) after conception, without doing any extensive research or experimentation, typically are not considered inventors.

Inventorship in a patent application is different from authorship as stated in a scientific publication. Whereas protocol or professional courtesy may lead one to attribute authorship of a scientific article to a number of individuals such as supervisors, technicians, or others who may have played little or no role in either writing the article, conceiving the ideas set forth in the article, or performing...
research or experimentation, the determination of inventorship in a patent application is defined by law.

The starting point for inventorship issues is the Patent Act of 1952. The relevant sections read:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of [the Patent Laws]." 35 U.S.C. § 101.

"An application for patent shall be made, or authorized to be made, by the inventor, except as otherwise provided . . ." 35 U.S.C. § 111.

"When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent." 35 U.S.C. § 116.

Many cases have elaborated on joint inventorship, which is said to be "one of the murkiest concepts in the muddy metaphysics of patent law." Meuller Brass Co. v. Reading Industries, Inc., 352 F. Supp. 1357, 1372 (E.D. Pa. 1972). A good summary of the law of joint inventorship is provided in Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456 (Fed. Cir. 1998) (online at http://www.ll.georgetown.edu/federal/judicial/fed/opinions/97opinions/97-1269.html):

"Because conception is the touchstone of inventorship, each joint inventor must generally contribute to the conception of the invention. 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."

"[F]or the conception of a joint invention, each of the joint inventors need not make the same type or amount of contribution to the invention. [O]ne does not qualify as a joint inventor by merely assisting the actual inventor after conception of the claimed invention. One who simply provides the inventor with well-known principles or explains the state of the art without ever having 'a firm and definite idea' of the claimed combination as a whole does not qualify as a joint inventor. . . ."

"Furthermore, a co-inventor need not make a contribution to every claim of a patent. A contribution to one claim is enough." 135 F.3d at 1460 (citations omitted).

As the cases mention, each situation must be evaluated on its facts. Keeping good notes and records of research and design efforts can help in the identification of
the correct inventor(s).

A failure to include a joint inventor (non-joinder) or an improper joinder of a non-inventor (misjoinder) can be fixed if the mistake was made through error and without deceptive intent. However, underlying ownership issues can make such correction a complicated matter. The Ethicon case is an example of how a failure to include a joint inventor can come back to haunt a patent owner. In Ethicon, the omitted joint inventor was identified by the defendant, U.S. Surgical, which obtained a paid-up retroactive license from the omitted joint inventor before trial. The court found that the person identified by U.S. Surgical was indeed an omitted joint inventor and that the retroactive license was a valid exercise of the rights of the co-inventor. U.S. Surgical avoided infringement liability on this basis.

Ethicon illustrates why it makes sense to err on the safe side and include in the list of inventors all people who could reasonably be deemed to have contributed to the conception of the inventions claimed. A company that seeks a patent on the invention of an employee is also wise to deal with inventorship and ownership issues early on, before the employee leaves the company or the invention becomes a huge commercial success. The company should obtain the inventor's signature on an assignment document as early as possible to avoid having to obtain one later from an inventor who has become uncooperative. Carefully considering inventorship issues early in the patenting process is time well spent.

Finally, a comment about provisional patent applications, which do not require claims and often do not include them. A provisional patent application should identify all persons who may reasonably be named as inventors of any of the subject matter described in the application, even if their contribution(s) may later be excluded from the claims during prosecution. Inventorship can be revisited when claims are prepared for filing in a nonprovisional application based on the provisional application.

**CONCLUSION**

Inventorship is a fact-oriented issue that depends on the circumstances surrounding the conception of each of the necessary elements of the invention claimed in a patent. Attention to inventorship issues early in the patent application process can help avoid later complications in the enforcement of patents issuing on an application. Your patent attorney has experience with inventorship issues and can assist in correctly identifying the inventors that should be named in a patent application.