Deciding on Ownership of Inventions

Employer-employee relationships determine who owns inventions and confidential information

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A fundamental issue concerning inventions and confidential information is ownership. Typically, the issue arises as between employer and employee. The issue is of significant importance with regard to inventions since 84% of American patents are awarded to employed inventors and most of these are assigned to the inventor's employer. Until recently, for an employer to obtain ownership of these patents, all that was required was a clause in an employment agreement requiring assignment of the patent. State statutes in Minnesota, California, Washington, North Carolina and Illinois have changed the rules, and if your employment agreements in those states are not in compliance with the applicable statute, the assignment provisions in your employment agreements are void.

The law concerning employer-employee ownership of inventions and confidential information is rapidly changing. To assist in understanding these changes, the law prior to these changes will be reviewed and the effect of the changes will then be examined.

INVENTIONS

Common Law

As early as 1890 the Supreme Court grappled with the issue of employer-employee rights in inventions. The court distinguished two types of inventions—those made by employees "employed to invent" and those made by other employees in "general employment" of a non-inventive nature, using the employer's property. According to the court, the first type of invention is the property of the employer; the second type is the property of the employee, subject to a nontransferable shop right in favor of the employer.

Absent a specific agreement, an employer's rights arise from the inventor's employment status. Although federal common law may control who initially receives title to an invention, state law determines an inventor's employment status. The employer has the burden of proving that the inventor's employment status required the inventor to assign a particular patent. The employer's expectations of the employee are an indication of the employee's status. The expectations can be broken down into three categories.

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An employer can hire an employee and expect him to: (1) invent a specific thing, (2) generally exercise his inventive skills, or (3) not invent at all.

An employee is hired to create a specific invention when his employer pays him to invent either a specific thing or to solve a specific problem. The inventor implicitly agrees to assign the resulting patent to his employer. The employee hired to invent a specific thing has a contractual and equitable duty to assign a patent even for an invention created without his employer's help or knowledge.

A more difficult problem arises when an employee hired to invent a specific thing creates an invention outside his assigned duties. Even this employee, under the common law, is not required to assign a patent that is outside the scope of his employment if it is also unrelated to his employer's business and immediate research. According to the United States Supreme Court, an employee in this situation must only show that the invention is outside the scope of his employment.

Exercise Skills

An employee hired to exercise his inventive skills generally is hired to pursue his creative instincts, even if diverse from his assigned work; his employer anticipates no specific result or invention. This employee does not implicitly agree to assign any resulting patents to his employer, although some courts infer an agreement to assign patents arising from the inventor's work. In one decision the Supreme Court held an employer may own a patent of an employee hired generally to exercise his inventive skills if the inventor created the invention during working hours, the patent is within the employer's scope of business, or the inventor was assigned similar tasks.

An employee who is not hired to invent does not impliedly agree to assign any patent, even one created through his employment, because his salary is not intended to be compensation for inventing. While a noninventive employee owns the patent, his employer may have a nonexclusive license to use the invention. This license exists either because the inventor used his employer's resources in creating the invention or because his employer promoted the invention while reasonably expecting a royalty-free use. This license arises under the legal principle of a shop right.

Shop Right

A shop right is an employer's royalty-free, nonexclusive, and nontransferable license to use an employee's patented invention. An employment relationship does not automatically create a shop right. Rather, the employer must establish, under state law, an implied contract creating a shop right. If the inventor and his employer have already entered into an express agreement concerning patent rights,

a court will not infer a shop right.

A shop right exists for the life of the patent even if the employment relationship terminates earlier.

Under the shop right, the employer can make, use, and sell articles embodying the patented invention. This right, however, does not permit the employer to sell articles outside his normal range of business.

Employment Agreements

The common law provides a wide area within which the rights and obligations of the employer and employee are determined. At the outer ends of the area, the results reached appear fair and reasonable. At one end, the employee who engages in inventive activity entirely independently of his job is entitled to lay claim to the inventions and patents that result.

Likewise, at the other end, an employer who employs an employee for the specific purpose of engaging in a given inventive activity should be entitled to the resulting inventions and patents. In between, however, the doctrine can result in considerable arbitrariness, depending upon whether the concept of employment is given a broad or a narrow interpretation.

Consequently, common law often has proven to be unsatisfactory to both employers and employees and has, to a considerable extent, been supplanted by contractual arrangements such as employment agreements.

Most modern employers, unwilling to allow vague common-law doctrines determine their patent rights, use express written contracts to allocate patent rights between themselves and their employees. These agreements supercede the common law. The majority of states allow these contracts which usually transfer all of the inventor's patent rights to the employer in return for the inventor's regular salary. Minnesota, California, Washington, North Carolina and Illinois have statutory restrictions on invention assignments.

Most employer-employee agreements contain clauses that: (1) require protection of trade secrets and confidential information; (2) require the employee to assign inventions; (3) require the employee to cooperate in disclosing inventive activity; and (4) require the employee to cooperate in patent prosecution activities.

While the last two items follow a fairly standard pattern, the obligation to assign inventions varies from agreement to agreement. Some agreements are limited to inventions made in the actual course of the inventor's research, while some agreements include inventions unrelated to the employer's business or research and made independently by the employed inventor. These contracts may also contain trailer clauses requiring the employed inventor to assign inventions made for a certain period after leaving employment.

Courts may construe such agreements strictly against the employer and in favor of the employee or could, in some cases, refuse to enforce a broad contract as unconscionable or overreaching. The current trend in the courts is to attempt to balance perceived inequities in bargaining position between employers and employees, and to limit the scope of inventions covered by employment agreements to those in which the employer has a legitimate and justified business interest.

In some respects, the situation is worse than where there is no employment agreement, because disputed inventions are handled on a case-by-case basis, removing the certainty desired by employers, both for making search and development investment decisions and for providing a uniform policy regarding administration of employee inventions.

STATE STATUTES

In response to this uncertainty, some employers have increased the restrictions in employment agreements. Some states have viewed this action as unfair to employees in light of the bargaining positions of the parties and have enacted statutes.

In 1977, Minnesota passed the first "freedom-to-create" statute. The Minnesota statute as well as other recently-enacted state statutes attempt to prevent an employer from abusing his unequal bargaining power. The statutes accomplish this goal in part by limiting the type of inventions that an employer can contractually require an inventor to assign.

Five states (Minnesota, Washington, California, North Carolina and Illinois) have enacted statutes. In each of the five states, assignment provisions applicable to inventions that fall outside the field of company business and are developed by the employee outside the scope of work and without use of company time or resources, are now considered against public policy. An employment agreement containing an overly broad assignment provision applicable to "all" inventions conceived or made by the employee will, to this extent, be void and unenforceable under any of the five statutes.

Introductory Clause

Each of the five state statutes has the same introductory clause. This clause provides that any provision in an employment agreement that requires an employee to assign any of his rights in an invention to his employer does not apply to an invention for which none of the employer's resources were used and which was developed *entirely* on the employee's own time.

In addition to the two conditions set forth in the introductory clause, each of the five statutes sets forth two other conditions. Although the two additional conditions are the same in each of the statutes, the language setting forth the conditions is confusing. A question has been raised as to whether both or only one of the additional conditions must be satisfied before the invention is assignable. The Minnesota statute sets forth, for example, an assignment provision in an employment agreement shall not apply to an invention for which no resources of the employer were used and it was developed on the employee's own time and:

> "which does not relate (a) directly to the business of the employer or (b) to the employer's actual or demonstrably anticipated research or development, or which does not result from any work performed by the employee for the employer."

The Washington statute, however, provides an assignment provision will not apply to an invention for which no resources of the employer were used and it was developed on the employee's own time:

> "unless (a) the invention relates (i) directly to the business of the employer, or (ii) to the employer's actual or demonstrably anticipated research and development, or (b) the invention results from any work performed by the employee for the employer."

Minnesota and California

The Minnesota and California statutes are substantially the same in that they include the same language setting forth the two additional conditions. This language, set forth above, includes complicated combinations of "and" and "or" subparts that are stated in the double negative. This language has resulted in confusion over whether an employee avoids assigning an invention to his employer if he can prove all four of the conditions do not exist, or whether the employee need show the two conditions in the introductory clause and one of the remaining conditions do not exist.

One commentator has concluded the language of the Minnesota and California statutes requires only the first two conditions and one of the second two conditions need be satisfied by an employee in order for the invention not to be assignable. This interpretation has been put into question by comments accompanying a bill introduced in the California legislature intended to amend the California statute.

In comments accompanying California Senate Bill 1457, January 24, 1984, it was stated the bill was intended to resolve the uncertainty concerning whether both or only one of the last two conditions in the existing statute must be shown by an employee claiming rights in an invention. The bill sought to require all four conditions to be shown. This bill did not pass and it is not known whether the reason for the failure to pass was due to the interpretation of the number of conditions that need be shown.

Further confusing the interpretation of the number of conditions that must be shown is another bill pending before the California legislature (Senate Bill No. 441) redrafting the California statute to require all four conditions to be proven by the employee.

Interpretation

Although interpreting the number of conditions an employee must prove under the Minnesota and California statutes is confusing, it appears the proper interpretation under both the Minnesota and California statutes is that, if an invention does not result from the employee's work for the employer, the invention falls into the category of nonassignable inventions. This is the determination even if the invention may relate to the employer's business or research/development activities.

This interpretation, which requires an invention to result from work for the employer and relate to the business of the employer or to the research and development of the employer before it is assignable, fails to recognize that often inventions within the field of the employer's business or research and development are derived from trade secrets and other confidential information to which the employee is exposed.

Although the invention might not result from the employee's work, it probably will be based on knowledge gained during employment. To prohibit assignment of these inventions, as under the Minnesota and California statutes, ignores the realities surrounding employment and may be contrary to the understanding of the parties.

Washington, North Carolina and Illinois

The North Carolina and Illinois statutes include the language of the Washington statute set forth on page 10. All four conditions of the statutes need to be satisfied to prohibit enforcement of an assignment provision in an employment agreement. Under these statutes, an assignment provision does not apply if no employer resources were used, and the invention was developed entirely on the employee's own time, "unless" the invention relates to the employer's business or to the employer's actual or anticipated research or development or the invention results from any work for the employer. In each of these three statutes the burden of proof of showing all four conditions is on the employee.

Under these statutes, the employer can acquire title to an invention under an appropriate assignment provision even though no resources of the employer were used and the employee developed the invention on his own time if the invention relates directly to the business of the employer or to the employer's research and development.

The employer can also acquire title even though none of his resources are used and the employee developed the invention entirely on his own time if the invention results from work performed by the employee for the employer. The burden of proof imposed upon the employee by this provision is formidable, at least as applied to skilled employees employed to invent. The rationale for imposing this burden on the employee (instead of the employer) is that these employees enter employment with an understanding that the employer will, under certain circumstances, own resulting inventions. In return, the employee is given access to trade secrets and confidential information of the employer which, in the absence of such employment, the employee could not otherwise obtain.

The Washington, North Carolina and Illinois statutes can be interpreted to permit an assignment of an invention made by a maintenance person entirely on his own time, without use of company resources, if the invention relates to company business. This result is contrary to common law doctrine and to this extent, these statutes tip the balance of the equities in favor of the employer.

Notification

Under all the state statutes except North Carolina, if an employment agreement is entered into after the effective date of the statute and the agreement contains a provision requiring the employee to assign rights in inventions, written notification must be provided to the employee at the time the agreement is made. The notification must inform the employee that the agreement does not apply to those inventions that are exempt under the applicable statute. The best way to provide written notification is in the agreement. An appropriate provision is:

> "No provision in this employment agreement is intended to require assignment of any of the employee's rights in an invention if no equipment, supplies, facilities, or trade secret information of the employer was used, and the invention was developed entirely on the employee's own time; and the invention does not relate (directly) to the business of the employer or to the employer's actual or demonstrably anticipated research or development; or does not result from any work performed by the employee for the employer."

This notice is conservative and favors the employee since it requires only those conditions required by the Minnesota and California statutes. For employees in Washington, North Carolina and Illinois, if a less conservative clause is preferred, the word "and" could replace the last "or." In Minnesota and Washington, "directly" should be inserted where shown in parentheses.

ILLUSTRATIVE EXAMPLES

A hypothetical will assist in understanding the different results under the common law, employment agreements and the state statutes. In the hypothetical a multidivision company named the Auto Company has an automatic transmission division and a computer division. The computer division is engaged in manufacturing computers and creating software for the computers. Bob Brown, an employee of the Auto Company in the transmission division, did not sign an employment agreement and was hired specifically to develop a new automatic transmission for automobiles. While working on this project and using the resources of Auto Company, Brown developed a new automatic transmission. On his own time, using his own equipment in his basement, Brown also developed a transmission lubricant. Brown enjoys computer games and on his own time using his personal computer he developed a new computer game. Brown also has a large yard and while raking it he designed a new rake. Each of these inventions will be analyzed under the common law and each of the state statutes.

Common Law

Under the common law, Brown would be considered an employee hired to invent a specific thing, an automatic transmission. The automatic transmission developed by Brown in this hypothetical belongs to the Auto Company. If Brown were hired to exercise his inventive skills generally instead of his specific inventive employment, the automatic transmission would still have to be assigned since it is within the scope of the business of Auto Company.

The transmission lubricant is outside the scope of Brown's assigned duties and was developed without using company resources but it is related to the business of the Auto Company. This invention is an example of a situation not easily resolved under the common law. Under the common law, an employee is not required to assign an invention that is outside the scope of his employment if it is unrelated to his employer's business and research.

Transmission lubricant is related to the business of the automatic transmission division of the Auto Company and the invention would probably have to be assigned under the common law. Even if Brown were hired to exercise his inventive skills generally, the transmission fluid would probably be assigned to the Auto Company under the common law since it is within the scope of the business of the company.

The computer game invented by Brown is not within the scope of his employment and is unrelated to the business of the division by which he is employed. For these reasons, under the common law it would seem the invention would belong to Brown. An argument could be made that the invention is related to the business of the computer division of the Auto Company and should belong to the company. The most likely result, however, is the invention would belong to Brown.

The rake is not related to the business of any division of the Auto Company, it is not related to any assigned duties of Brown, and no resources of the company were used in developing the rake. In these circumstances, the invention would belong to Brown under the common law.

Employment Agreement

Who would own the four inventions if Brown signed an employment agreement and was employed in one of the five states with a statute directed to the assignment of inventions? Under each of the five state statutes the patent for the automatic transmission developed by Brown would be assigned to the Auto Company. The invention was developed using company resources, on company time, it relates to the business of the automatic transmission division and results from work done for the company. All four conditions in each of the five statutes is satisfied.

With regard to the transmission fluid, this was developed by Brown on his own time using his resources rather than those of the company. The first two conditions in each of the five statutes is satisfied in Brown's favor. The invention does relate to the business of the company, however. Since Brown cannot satisfy all four conditions under the Washington, North Carolina and Illinois statutes, the invention would have to be assigned to the Auto Company.

This invention may belong to Brown under the Minnesota or California statutes. Whether it belongs to Brown under these two statutes depends on if the invention is interpreted as resulting from work performed by Brown for the Auto Company. If Brown were hired specifically to invent, the invention would result from his work and the invention would be assigned under the Minnesota and California statutes. The invention may not be assigned under these statutes if Brown were hired for general inventive purposes. The likely result is the invention would be assigned to the Auto Company since the invention is so closely related to automatic transmissions, the specific product of the transmission division of the company.

Under the Minnesota and California statutes the computer game invention would not be assigned to the Auto Company since no resources of the company were used, Brown invented the game on his own time, and it did not result from work performed by Brown for the company. Since the invention does relate to the business of the computer division of the company, however, it can be argued the invention must be assigned under the Washington, North Carolina and Illinois statutes. Whether a court would in fact rule the invention must be assigned is questionable since there is little nexus between Brown's duties at the Auto Company and his computer game.

None of the statutes would require assignment of the rake. Brown used no resources of his employer, the invention was conceived on his own time, the rake does not relate to the business of any division of the Auto Company and it does not result from any work performed by Brown for the Auto Company.

Ownership of inventions and confidential information has become a complicated issue in view of recent state statutes and judicial decisions. To make this issue manageable, one should be aware of the state statutes and provide written notification regarding employee rights under the statutes in employment agreements.