



School of Law
UNIVERSITY OF GEORGIA

Journal of Intellectual Property Law

Volume 3 | Issue 1

Article 7

October 1995

Unhitching the Trailer Clause: The Rights of Inventive Employees and Their Employers

Marc B. Hershovitz

Follow this and additional works at: <https://digitalcommons.law.uga.edu/jipl>



Part of the [Contracts Commons](#), and the [Intellectual Property Law Commons](#)

Recommended Citation

Marc B. Hershovitz, *Unhitching the Trailer Clause: The Rights of Inventive Employees and Their Employers*, 3 J. INTELL. PROP. L. 187 (1995).

Available at: <https://digitalcommons.law.uga.edu/jipl/vol3/iss1/7>

This Notes is brought to you for free and open access by Digital Commons @ University of Georgia School of Law. It has been accepted for inclusion in Journal of Intellectual Property Law by an authorized editor of Digital Commons @ University of Georgia School of Law. [Please share how you have benefited from this access](#) For more information, please contact tstriepe@uga.edu.

UNHITCHING THE TRAILER CLAUSE: THE RIGHTS OF INVENTIVE EMPLOYEES AND THEIR EMPLOYERS

I. INTRODUCTION

The age of the cloistered inventor has long since passed. Inventors such as Franklin, Bell, and Edison have assumed heroic stature in the American record. Nevertheless, their kind has not been seen in almost a century, and they are not likely to be spotted in the near future. Ironically, it can be said that Edison, the quintessential heroic inventor, is in large part responsible for the near evisceration of the tinkerer as a successful inventor.

Edison's laboratory in Menlo Park, New Jersey, which gave the world the phonograph and the incandescent light bulb, had a profound impact on *how* inventors invent. By supervising groups of employees developing inventions, Edison created the prototype of the modern industrial research laboratory.¹ The typical inventor of today is not a tinkerer toiling in the corner of a garage. The work of an inventor has largely become a professional occupation—in other words, inventors usually are employees.² The rise of the employed inventor has caused the common law to develop rules defining ownership rights in patents covering inventions developed by the employed inventor. However, as with many common law rules governing the employer-employee relationship, the parties are free to contract around the rules courts have developed.³

¹ See 17 THE ENCYCLOPAEDIA BRITANNICA MICROPAEDIA 969 (15th ed. 1993) (discussing Edison's move to Menlo Park, New Jersey with "key associates").

² See *Rights of Employed Inventors: Hearings on H.R. 4732 and H.R. 6635 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary*, 97th Cong., 2d Sess. 1 (1982) (statement of Rep. Kastenmeier) (stating employed inventors are issued 84 percent of American patents); see also David Stipp, *Lab Legacy: Inventors are Seeking Bigger Share of Gains From Their Successes*, WALL ST. J., Sept. 9, 1982, at 1 (claiming approximately 75 percent of all patents are issued to employed inventors).

³ See RESTATEMENT (SECOND) OF AGENCY § 397 (1957) (when agent has right to patent); *Aetna-Standard Eng'g Co. v. Rowland*, 493 A.2d 1375, 1378, 228 U.S.P.Q. (BNA) 292 (Pa. Super. Ct. 1985) (explaining in absence of employment contract, common law allocates rights in inventions developed by employees); *Vigatron, Inc. v. Ferguson*, 419 A.2d 1115, 1117, 215

A principle provision concerning the allocation of patent rights which is increasingly finding its way into employment contracts is the "trailer clause."⁴ A trailer clause is a contractual provision in which the employee-inventor agrees to assign his entire interest in any invention he creates during a period following the termination of the employment relationship.

The enforcement of trailer clauses raises serious questions of public policy. If the purpose of patents is to encourage invention by granting an inventor a twenty year monopoly, thereby enabling him to exploit the fruit of his creative endeavors, does the enforcement of an employment contract's trailer clause abrogate this purpose? In a modern research laboratory, to what extent is an invention the product of an individual creative mind as opposed to the collective genius of the laboratory? Is the principle of freedom of contract controlling in these circumstances? Should it be controlling?

This Note examines the competing interests of the employed inventor and his employer, the common law's allocation of ownership rights to inventions developed by an employee, and the enforceability of trailer clauses. Finally, this Note argues that trailer clauses should be unenforceable as a matter of public policy.

II. BACKGROUND

The United States Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."⁵ In accordance with the Intellectual Property Clause, Congress authorized the issuance of

U.S.P.Q. (BNA) 354 (N.H. 1980) (same); *Oliver v. Lockport Mills, Inc.*, 163 N.Y.S.2d 317, 323 (N.Y. Sup. Ct. 1956) (same), *appeal dismissed*, 163 N.Y.S.2d 356 (N.Y. App. Div. 1957).

⁴ "Trailer clause" is the most common term of art used for the covenants discussed herein. Other terms less frequently utilized by courts and commentators include "holdover clause," "preinvention assignment agreement," and "patent waiver agreement." However, preinvention assignment and patent waiver agreements customarily refer to a series of contract clauses that provide for the assignment of patent rights that arise both during and after (and, in some rare instances, before) the employment relationship.

⁵ U.S. CONST. art. I, § 8, cl. 8.

patents to protect discoveries by inventors.⁶ A patent provides the inventor with a monopoly over the manufacturing of the subject invention for a term of twenty years.⁷

As the only source of a product, patent owners can charge as high a price as they desire. The prospect of a limited monopoly is a powerful incentive encouraging the creation of intellectual property.⁸ Indeed, courts have recognized the prospect of receiving a patent as an inducement to invent and invest.⁹

In order for an invention to be patentable, it must consist of a truly novel concept.¹⁰ Additionally, the combination of known mechanical skills will not suffice for a patentable invention unless the collection results in a new and different effect.¹¹ Consequently, there are two types of inventions: those which are patentable and those which are not.

Each invention, patentable or not, arises out of the inventive process. There are two distinct parts to the inventive process: (1) conceptualization and (2) reduction to practice.¹² Conceptualization is the undefinable mental activity that culminates in the generation of an idea.¹³ Reduction to practice is the act of trans-

⁶ Cf. 35 U.S.C. § 281 (1988) (authorizing remedy for patent infringement); *Atari Games Corp. v. Nintendo of Am., Inc.*, 897 F.2d 1572, 1576, 14 U.S.P.Q.2d (BNA) 1034 (Fed. Cir. 1990) (stating Congress authorized civil actions for patent owners to protect their inventions); *THK Am., Inc. v. NSK, Ltd.*, 157 F.R.D. 660, 663, 33 U.S.P.Q.2d (BNA) 1248 (N.D. Ill. 1994) (same).

⁷ 35 U.S.C. § 154 (1988), amended by Pub. L. 103-465, Title V, §§ 532(a)(1), 534, Dec. 8, 1994.

⁸ RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 3.3, at 38-39 (4th ed. 1992).

⁹ See *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 330-31 (1945) (stating patent is "inducement . . . directed to disclose advances in knowledge"); *Interstate Bakeries v. General Baking Co.*, 84 F. Supp. 92, 113, 80 U.S.P.Q. (BNA) 566 (D. Kan. 1948) (asserting patent "is a special privilege"); *General Bronze Corp. v. Cupples Prods. Corp.*, 99 F. Supp. 924, 928, 86 U.S.P.Q. (BNA) 296 (E.D. Mo. 1950) (citing *Sinclair & Carroll Co.*, 325 U.S. at 330-31), *aff'd*, 139 F.2d 154 (8th Cir. 1951).

¹⁰ 35 U.S.C. §§ 101-02 (1988); *In re Herthel*, 104 F.2d 824, 42 U.S.P.Q. (BNA) 85 (C.C.P.A. 1939).

¹¹ See sources cited *supra* note 10.

¹² See *In re Yarn Processing Patent Validity Litig.*, 498 F.2d 271, 275, 183 U.S.P.Q. (BNA) 65 (5th Cir.) (delineating "four phases" of patent process: (1) conceptualization, (2) embodiment in model or working prototype, (3) experimenting to eliminate further refinement, and (4) patent), *cert. denied sub nom. Sauquoit Fibers Co. v. Leeson Corp.*, 419 U.S. 1057 (1974); *Ex-Cell-O Corp. v. Litton Indus. Prods.*, 479 F. Supp. 671, 684, 205 U.S.P.Q. (BNA) 612 (E.D. Mich. 1979) (same).

¹³ See sources cited *supra* note 12.

ferring the idea into something physical, such as a sketch, blueprint, or model.¹⁴

In order to be able to apply for a patent, an invention must exist beyond the conceptualization stage.¹⁵ However, clauses in employment contracts assigning rights in inventions are primarily concerned with the timing of the conceptualization phase of the inventive process.¹⁶

A. THE COMPETING INTERESTS OF EMPLOYERS AND EMPLOYEES

The common law with regard to the assignment of employee inventions is long settled.¹⁷ Nevertheless, both the employer and employee can assert powerful arguments to support claims on inventions developed during the employer-employee relationship.

The inventive employee has persuasive claims to inventions developed during the employment relationship. Recognizing the valuable resources that employers invest in an inventive employee's creative talent, it is still an employee's genius that coalesces concepts into inventions.¹⁸ Compared to the resources provided by the employer, the inventive employee views his genius as an equal, if not greater, ingredient in the inventive process.

A corollary to the inventive employee's belief that the value of his creative genius should vest the rights to his invention in himself is

¹⁴ See sources cited *supra* note 12.

¹⁵ See 35 U.S.C. §§ 111-14 (1988) (requiring written specifications and, where necessary, drawings, models, or specimens for patent application).

¹⁶ For example, Westinghouse's trailer clause states that

Westinghouse shall have a perpetual, royalty-free, nonexclusive license to fully utilize for any purpose all inventions, computer programs, copyright works, and mask works made, *conceived*, or authored by me, alone or jointly with others, within one year of termination of my employment with Westinghouse, related to work I performed during my last year of employment with Westinghouse, and which utilized Confidential Information.

Westinghouse, *Employee Intellectual Property Agreement* at § 2, ¶ 2 (1987) (on file with author) (emphasis added).

¹⁷ Steven Cherenky, *A Penny for Their Thoughts: Employee-Inventors, Prevention Assignment Agreements, Property, and Personhood*, 81 CAL. L. REV. 597, 616 n.93 (1993) (stating common law allocating property rights in inventions developed over 90 year span ending in 1933).

¹⁸ See Cherenky, *supra* note 17, at 649 (quoting Thomas Jefferson from his letter to Isaac McPherson stating "[i]nventions are 'the fugitive fermentation of an individual brain'").

the belief that inventive employees are under-compensated for inventions they create.¹⁹ This belief is not unfounded. Many large American corporations known for their efforts in research and development do not give bonuses to employees who receive patents.²⁰ For those companies that do reward successful inventive employees, it is not uncommon for the reward to be as little as one dollar if not merely a congratulatory plaque.²¹ This holds true regardless of the value of the invention to the employer.²²

Notwithstanding employees' concerns over their rights in their inventions, employers are able to advance powerful arguments to support their position. Employers invest money. Not only do employers pay the inventive employees' salaries, employers also provide inventive employees with places to work and the materials and other resources needed to create.

The modern industrial research laboratory is not a honeycomb of office cubicles where inventive employees toil independently. Instead, while employees in the modern laboratory may work on individual projects, their work product is usually a collaborative effort resulting from both formal and informal brainstorming sessions. To the extent that an invention owes its origin to the collective genius of the laboratory, an employer's claim to the invention is strengthened. From the employer's perspective, it is "but for" the employment relationship that the employee would not have developed the invention.

Furthermore, an employer has a compelling interest in an invention to the extent that trade secrets are encompassed and used in the development of the invention. The employer's interest in an invention increases in direct proportion with the extent the employer's proprietary information is utilized in developing the

¹⁹ *Employed Inventors Want Part of the Payoff*, CHEMICAL WEEK, Mar. 24, 1982, at 50, 52. For example, the inventors of a drug which prevented the clogging of arteries received no bonus compensation or even recognition while their employer stood to make hundreds of millions of dollars per year off sales of the drug. *Id.* at 56.

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

invention.²³ If the inventive employee has full rights to inventions incorporating trade secrets of the employer, the employee may, by disseminating the invention, or even merely through applying for a patent, disclose the employer's trade secrets, thereby potentially inflicting incalculable damage upon the employer. An employer's claim is weakened, however, if its trade secret only served an illuminative purpose to the inventive employee and was not actually incorporated into the invention.²⁴

B. THE COMMON LAW

At common law, whether or not an employee must assign his entire right, title, and interest or any part thereof in an invention he has developed depends upon his employment status at the time he actually conceptualized the invention.²⁵ Additionally, whether the employee utilized the employer's resources to assist in developing the invention²⁶ and whether the invention relates to some area

²³ A trade secret has value because it gives its possessor an advantage over competitors insofar as the competitors do not know or use the trade secret. Cf. RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939) (defining secrecy component of "trade secret"). If trade secrets are incorporated into an invention and the invention is patented and/or disseminated, others may discover the trade secret through the studying or reverse engineering of the invention. In other words, the trade secret is not a secret anymore. As a result, when an employer's trade secret is incorporated in an invention, the employer's interest in the invention is at least the equivalent of his interest in keeping his trade secret concealed.

²⁴ If the employer's trade secret only served an illuminative purpose to the employee-inventor—that is, if the knowledge of the trade secret stimulated the creative process leading to the invention as opposed to being actually incorporated into the invention—then there is no danger that the employer's trade secret will be discovered if the invention is patented and/or disseminated. See *supra* note 23.

²⁵ William P. Hovell, Note, *Patent Ownership: An Employer's Rights to his Employee's Invention*, 58 NOTRE DAME L. REV. 863, 866 (1983); Neal Orkin, *The Legal Rights of the Employed Inventor: New Approaches to Old Problems (Part I)*, 56 J. PAT. [& TRADEMARK] OFF. SOC'Y 648, 649 (1974); see also *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, amended, 289 U.S. 706 (1933) (discussing rights of inventors in inventions developed during employment); *Solomons v. United States*, 137 U.S. 342 (1890) (same); *McClurg v. Kingsland*, 42 U.S. (1 How.) 202 (1843) (same); *Houghton v. United States*, 23 F.2d 386 (4th Cir.) (same), cert. denied, 277 U.S. 592 (1928); *Forberg v. Serval, Inc.*, 88 F. Supp. 503, 84 U.S.P.Q. (BNA) 88 (S.D.N.Y. 1949) (same); *Oliver v. Lockport Mills, Inc.*, 163 N.Y.S.2d 317 (N.Y. Sup. Ct. 1956) (same), appeal dismissed, 163 N.Y.S.2d 356 (N.Y. App. Div. 1957); Paul C. Van Slyke & Mark M. Friedman, *Employer Rights to Inventions and Patents of its Officers, Directors, and Employees*, 18 AIPLA Q.J. 127, 132-33 (1990) (delineating "basic principles" in employer/employee patent rights).

²⁶ See *infra* p. 195-196 (discussing shop right).

of the employer's business²⁷ are important considerations in the common law's allocation of patent rights between the employer and employee.

The employment relationship is a contractual matter. The employee agrees to labor under the direction of the employer in exchange for compensation. Where there is no express contract, the common law implies the contractual terms into the relationship.²⁸ This is illustrated by the default rule of the at-will doctrine. In the absence of an express or, depending on the state, implied agreement between the parties delineating the duration of employment or specifying that the employee cannot be terminated except for good or just cause, the common law dictates that the employee may quit at any time without any notice and that the employer may discharge the employee for a good reason, a bad reason, or no reason at all.²⁹

If an employee is no longer employed by his employer when he conceptualizes an invention, in the absence of a trailer clause,³⁰ the former employee has claim to the entire right, title, and interest in the patent resulting from his invention. This is consistent with the principle that when an employee leaves the

²⁷ While "related to the employer's business" is clearly broader than the scope of tasks and projects assigned to the employee, it is difficult to precisely define. Does it encompass the employer's existing business operations or does it include areas into which the employer may be interested or expecting to expand? If it includes areas into which the employer may be interested or expecting to expand, what are the limits to the "expansion territory?"

Another problem is posed by employers that own subsidiary corporations or are subsidiaries of larger corporations. Does "the employer's business" to which the invention must relate mean the actual corporation for which the employee directly works or does it include parent and subsidiary corporations?

²⁸ *E.g.*, *McKinney v. National Dairy Council*, 491 F. Supp. 1108, 1110-1111 (D. Mass. 1980) (stating "[w]hen the parties have reached an agreement otherwise sufficient to constitute a contract but have had no communication regarding a matter as to which their legal rights must be determined, the missing element may be supplied . . . by operation of a rule of law").

²⁹ *MARK A. ROTHSTEIN ET AL., EMPLOYMENT LAW* § 2.27, at 78 (1994); *e.g.*, *Figueroa v. West*, 902 S.W.2d 701, 704 (Tex. Ct. App. 1995) (delineating "long-standing rule" of at-will employment); *Williams v. Precision Coil, Inc.*, 459 S.E.2d 329, 340 (W. Va. 1995) (discussing "general rule" of employment-at-will).

³⁰ A contract provision requiring an employee to assign an invention conceptualized after the termination of the employment relationship is a trailer clause. *See supra* text and accompanying note 4 (describing increasing frequency of trailer clauses and delineating terms of art synonymous with "trailer clause").

employment relationship he is free to take the "experience, knowledge, memory and skill" he accumulated while working for the employer and use it to his benefit.³¹

While the common law has developed a clear, easily applied, bright-line rule regarding patent rights in post-employment inventions, the rules regarding the assignment of patent rights in inventions created during employment cannot be similarly characterized. A threshold question in determining the proper allocation of patent rights in an employee's invention is whether the employee was hired to invent. An employee is hired to invent if he is employed to develop inventions.³² If an employee is hired to invent, the employee must assign his entire right, title, and interest in any patents arising from inventions conceptualized during employment and stemming from the tasks delegated to him by his employer.³³ If not specifically expressed in the employment

³¹ Pittsburgh Cut Wire Co. v. Sufrin, 38 A.2d 33, 34 (Pa. 1944); Vendo Co. v. Long, 102 S.E.2d 173, 175 (Ga. 1958); International Election Sys. Corp. v. Shoup, 452 F. Supp. 684, 706, 200 U.S.P.Q. (BNA) 79 (E.D. Pa. 1978), *aff'd*, 595 F.2d 1212 (3d Cir. 1979); Sarkes Tarzian, Inc. v. Audio Devices, Inc., 166 F. Supp. 250, 262, 119 U.S.P.Q. (BNA) 20 (S.D. Cal. 1958), *aff'd*, 283 F.2d 695 (9th Cir. 1960), *cert. denied*, 365 U.S. 869 (1961); M. N. Dannenbaum, Inc. v. Brummerhop, 840 S.W.2d 624, 631-32 (Tex. Ct. App. 1992); J & K Computer Sys., Inc. v. Parrish, 642 P.2d 732, 735 (Utah 1982); Microbiological Research Corp. v. Muna, 625 P.2d 690, 697, 214 U.S.P.Q. (BNA) 567 (Utah 1981); Van Prods. Co. v. General Welding & Fabricating Co., 213 A.2d 769, 775, 147 U.S.P.Q. (BNA) 221 (Pa. 1965); RESTATEMENT (SECOND) OF AGENCY § 396(a) & (b) (1957); John E. Hannigan, *The Implied Obligation of an Employee*, 77 U. PA. L. REV. 970, 972 (1929).

³² STANLEY H. LIEBERSTEIN, WHO OWNS WHAT IS IN YOUR HEAD? TRADE SECRETS AND THE MOBILE EMPLOYEE 9 (1979); Solomons v. United States, 137 U.S. 342, 346 (1890).

³³ Solomons, 137 U.S. at 346; United States v. Dubilier Condenser Corp., 289 U.S. 178, 187 (1933); Gill v. United States, 160 U.S. 426, 435 (1896); Heywood-Wakefield Co. v. Small, 87 F.2d 716, 717, 32 U.S.P.Q. (BNA) 265 (1st Cir.), *cert. denied*, 301 U.S. 698 (1937); Ingersoll-Rand Co. v. Ciavatta, 542 A.2d 879, 886, 8 U.S.P.Q.2d (BNA) 1537 (N.J. 1988); LIEBERSTEIN, *supra* note 32; Hovell, *supra* note 25, at 866-68; Ronald B. Coolley, *Recent Changes in Employee Ownership Laws: Employers May Not Own Their Own Inventions and Confidential Information*, 41 BUS. LAW 57, 58-59 (1985); Van Slyke & Friedman, *supra* note 25, at 138; Henrik D. Parker, *Reform for Rights of Employed Inventors*, 57 S. CAL. L. REV. 603, 606 (1984).

This equitable duty to assign arises because only natural persons are able to receive patents, thereby making corporations unable to apply for patents. See 35 U.S.C. § 111 (1988) (stating "[a]pplication for patent shall be made, or authorized to be made, by the inventor . . ."); 37 C.F.R. § 1.41 (1994) (declaring "[a] patent must be applied for in the name of the actual inventor or inventors" or any person authorized to do so on behalf of the inventor or inventors). Nothing, however, limits the ability of corporations to receive patents by assignment from the inventor.

contract, it is implicit that what the employee is hired to invent will become the sole property of the employer.³⁴ An employee hired to invent is akin to a “hired gun.”³⁵

When one is employed to invent, one is directly compensated for his creative endeavors and operates under a clear expectation that the end result of his efforts, a patent, will be the property of his employer.³⁶ The employee hired to invent is analogous to an artist commissioned to create a piece of art. Just as an artist commissioned to paint a portrait or design a sculpture must relinquish his entire right, title, and interest in his creation,³⁷ so too must an employee hired to invent.

Most employees are not hired to invent. Nevertheless, this does not mean employees not hired to invent own the products of their creative endeavors free of any encumbrances. If an employee develops an invention during his hours of employment or uses his employer’s resources in developing an invention, the employer has a “shop right” in the invention.³⁸

A shop right is a nonexclusive right in favor of the employer to use the invention in its workplace.³⁹ An employer holding a shop right can duplicate the employee’s invention as often as it may find occasion to use the invention in its workplace.⁴⁰ A shop right remains in the employer’s shop—it is nontransferable, and it does not give the employer the right to license or sell the invention to others.⁴¹

Three rationales have been provided to explain the shop right.

³⁴ *Standard Parts Co. v. Peck*, 264 U.S. 52, 59-60 (1924); *Dubilier Condenser*, 289 U.S. at 187.

³⁵ LIEBERSTEIN, *supra* note 32.

³⁶ *Dubilier Condenser*, 289 U.S. at 187; *Standard Parts Co.*, 264 U.S. at 59-60.

³⁷ *Cf. Community for Creative Non-Violence v. Reid*, 490 U.S. 730, 10 U.S.P.Q.2d (BNA) 1985 (1989) (discussing “works made for hire” under 17 U.S.C. § 101(1)).

³⁸ *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 188 (1933); *Ingersoll-Rand*, 542 A.2d at 886; *McClurg v. Kingsland*, 42 U.S. (1 How.) 202 (1843); *Solomons v. United States*, 137 U.S. 342, 346 (1890); *Lane & Bodley Co. v. Locke*, 150 U.S. 193 (1893); *Van Slyke & Friedman*, *supra* note 25, at 142-47; *Cherensky*, *supra* note 17, at 616-17; 9 SAMUEL WILLISTON & WALTER H. E. JAEGER, A TREATISE ON THE LAW OF CONTRACTS § 1016 at 110 (3d ed. 1967); *Parker*, *supra* note 33, at 606-07; *Coolley*, *supra* note 33, at 26; BLACK’S LAW DICTIONARY 1378-79 (6th ed. 1990).

³⁹ See sources cited *supra* note 38.

⁴⁰ See sources cited *supra* note 38.

⁴¹ See sources cited *supra* note 38.

The prevailing and most persuasive reason given in granting a shop right in favor of the employer is equity.⁴² "Since the servant uses his master's time, facilities, and materials to attain a concrete result,"⁴³ equity gives the employer the limited bundle of rights in the invention known as a shop right.⁴⁴ A second justification for the granting of a shop right is estoppel in pais.⁴⁵ However, estoppel in pais is very similar to equity. In applying estoppel in pais to the employee who uses his employer's resources to develop an invention, it can be said that because the employee unilaterally commandeered his employer's resources to develop an invention, the employee should be estopped from denying the employer any rights in the invention. The third explanation for a shop right is an implied license.⁴⁶ In exchange for the employer's "aid" in developing the invention, the employee is said to have impliedly granted a license in favor of the employer in certain limited rights surrounding the invention.⁴⁷

In the absence of an express contract, a non-inventive employee who develops an invention during his own time and without the use of his employer's resources owns the entire right, title, and interest in any patent received covering the invention.⁴⁸ Furthermore, when an employee who is hired to invent develops, on his own time and without the assistance of his employer's resources, an invention which is unrelated to the task the employer assigned to him or is unrelated to his employer's business, the employee is under no duty to assign his rights in the invention to his employer.⁴⁹

⁴² Cf. Cherensky, *supra* note 17, at 616 n.93 (stating common law of property rights developed over 90 years culminating in landmark case of *United States v. Dubilier Condenser Corp.*, 289 U.S. 178); *Dubilier Condenser*, 289 U.S. at 188-89 (explaining shop right results from an application of equitable principles).

⁴³ *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 188-89 (1933).

⁴⁴ *Id.*

⁴⁵ *Gill v. United States*, 160 U.S. 426, 430-31 (1896). Estoppel in pais, also known as equitable estoppel, is a doctrine which, because of one's act, conduct, or silence when faced with a duty to speak, prohibits one from asserting a right he would legitimately possess. BLACK'S LAW DICTIONARY 551 (6th ed. 1990).

⁴⁶ Van Slyke & Friedman, *supra* note 25, at 143.

⁴⁷ Van Slyke & Friedman, *supra* note 25, at 143.

⁴⁸ *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 187 (1933); Cherensky, *supra* note 17, at 617.

⁴⁹ *Dubilier Condenser*, 289 U.S. at 187; Cherensky, *supra* note 17, at 617. For a discussion of the difficulty in interpreting "related to the employer's business," see *supra* note 27.

III. TRAILER CLAUSES

An employer desires certainty in the employer-employee relationship. Certainty is economical. Just as the at-will doctrine provides certainty in the employment relationship, the bright-line rules created by trailer clauses which explain when employees are required to assign inventions to their employer would be of great benefit to the employer.⁵⁰

It is a long held precept that an employee is free to take the experience, knowledge, memory, and skill which he accumulated while working for an employer and use it to his or another employer's benefit as long as he does not misappropriate trade secrets of his former employer.⁵¹ In seeking to establish certainty in the employer-employee relationship and to obtain more protection than the common law affords, employers frequently require employees to sign "intellectual property agreements"⁵² as a condition of employment.⁵³ Trailer clauses are often included in

⁵⁰ It can be argued that certainty benefits both parties to a potential transaction. However, the certainty in this area would not be of equal benefit to the employee. The likelihood that a corporation will employ an individual who will develop a patentable invention is much greater than the probability that a specific individual will develop a patentable invention while working for a company over a period of years. As the number of employees increases so does the disparity between the relative likelihoods. In other words, a large corporation knows that in all probability one of its employees will invent something patentable in which the corporation may want to claim ownership rights. The inventive employee, on the other hand, knows that chances are modest that he will ever invent something patentable. Furthermore, the non-inventive general employee knows it is highly unlikely that he will ever invent something patentable.

⁵¹ See sources cited *supra* note 31. It is important to note, however, that covenants not to compete can override this principle.

⁵² These agreements may be known alternatively as "confidentiality agreements" or, less frequently, "preinvention assignment agreements" and "patent waiver agreements." These agreements typically are the situs of trailer clauses in employment contracts.

⁵³ In an informal survey of several major corporations conducted by the author, every corporation contacted required the signing of an intellectual property agreement by employees as a condition of employment. Furthermore, all of the intellectual property agreements included trailer clauses of varying reaches and durations. See also *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 886 (N.J. 1988) (stating "[m]ost large, technologically advanced companies today require their employees by contract to assign their patents to their employers" and citing *Hovell*, *supra* note 25, at 864); *Cherensky*, *supra* note 17, at 617 (stating importance of common law allocation of property rights in inventions is slight "due to the prevalence of preinvention assignment agreements" and "most employers make preinvention assignment agreements a condition of employment").

intellectual property agreements.⁵⁴

Besides certainty, two additional concerns motivate employers to include trailer clauses in intellectual property agreements. First, there is a general anxiety surrounding employee fraud.⁵⁵ Because employers can be deceived as to when an employee-inventor develops an idea for an invention, employers live in fear of the employee who would develop an idea for a patentable invention, conceal it from his employer, and then leave to compete with his now former employer.⁵⁶ Second, employers recognize the reality that inventors "cannot open and close [their] mind[s] like a book."⁵⁷ As a result, employers utilize trailer clauses as a means to ensure that expenditures on their employees do not end up aiding the competition.

A. ENFORCEABILITY OF TRAILER CLAUSES

Trailer clauses are analogous to the covenants not to compete frequently found in employment contracts.⁵⁸ Both clauses operate to restrict the former employee's ability to work in the profession in which he is trained. Non-competitive or restrictive covenants explicitly restrict the employee's ability to work in the same field as his former employer. Trailer clauses have the same effect, but through a circuitous route.

While a trailer clause technically does not prohibit an inventive employee from working for a competitor, business competitors do not desire to hire individuals obligated under such a clause because the work product of such employees may not accrue to the new

⁵⁴ *Supra* note 53.

⁵⁵ See *General Signal Corp. v. Primary Flow Signal, Inc.*, Nos. 85-0471B & 86-034B, 1987 U.S. Dist. LEXIS 6929, at *12 (D.R.I. July 27, 1987) (finding "concept of the . . . patent must have existed in [the inventor's] mind before his employment with [plaintiff] ended").

⁵⁶ The facts giving rise to *General Signal Corp. v. Primary Flow, Inc.* are a prime example of what strikes fear in the heart of employers of inventive employees. In *General Signal Corp.*, the court found that the defendant employee conceived of the disputed patent while working for the plaintiff, held it back from the plaintiff, and claimed he conceived the invention a mere five days after the trailer clause had expired. *Id.* at *11-13.

⁵⁷ Harold M. Knoth, *Assignment of Future Inventions*, 27 CHI.-KENT L. REV. 295, 301 (1949).

⁵⁸ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 888 (N.J. 1988).

employer's benefit.⁵⁹ At best, employers that hire inventive employees obligated under such agreements will under-utilize the employees' inventive skills so as not to develop conflicts with prior trailer clauses.⁶⁰ This under-utilization of a burdened inventive employee's creative capacity may concomitantly diminish his rate of compensation. At worst, the inventive employee is unemployed.⁶¹ In today's society, where technology is advancing at breakneck speed, under-utilization or non-utilization of inventive skill may cause an inventive employee's creative capabilities and talent to atrophy.

Generally, contracts to assign future inventions, including trailer clauses, are enforceable under principles of contract law regulating competition.⁶² In order for a trailer clause to be enforceable, it must be limited in both time and subject matter.⁶³

1. *Time.* The duration of a trailer clause must be reasonable.⁶⁴ Such reasonableness is measured by balancing the relevant interests affected by the clause. From the employer's perspective, the clause needs to be in operation long enough to safeguard the employer's protectable interests. The employer's interest in protection is weighed against the hardship imposed upon the

⁵⁹ Indeed, many employee intellectual property agreements include clauses designed to alert employers to whether an employee is restrained by a trailer clause from a prior employment contract. For example, the final section of Westinghouse's intellectual property agreement reads:

There is no agreement or restriction which prevents the performance of my duties under this Agreement, except an agreement with _____, a copy of which is attached hereto. (If there is none, insert "no exception.")

Westinghouse, *Employee Intellectual Property Agreement* at § 13 (1987) (on file with author).

⁶⁰ See Harlan M. Blake, *Employee Agreements Not to Compete*, 73 HARV. L. REV. 625, 627 (1960) (discussing how post-employment restrictions "clog the market's channeling of manpower to employments in which its productivity is greatest"). Newburger, Loeb & Co., Inc. v. Gross, 563 F.2d 1057, 1082 (2d Cir. 1977) (stating post-employment restrictions "can tie up industry expertise and experience"), *cert. denied*, 434 U.S. 1035 (1978).

⁶¹ See Edward L. Raymond, Jr., Annotation, *Construction and Effect of Provision of Employment Contract Giving Employer Right to Inventions Made By Employee*, 66 A.L.R.4th 1135, § 38(b) (1994) (discussing *Guth v. Minnesota Mining & Mfg. Co.*, 72 F.2d 385 (7th Cir. 1934), *cert. denied*, 294 U.S. 711 (1935)).

⁶² Knoth, *supra* note 57, at 296.

⁶³ *Dorr-Oliver, Inc. v. United States*, 432 F.2d 447, 452, 167 U.S.P.Q. (BNA) 474 (Ct. Cl. 1970).

⁶⁴ *Id.* at 452 (citing *Guth v. Minnesota Mining & Mfg. Co.*, 72 F.2d 385 (7th Cir. 1934), *cert. denied*, 294 U.S. 711 (1935)).

employee. Additionally, the public interest is considered.⁶⁵

There is no bright-line rule as to when a trailer clause will be held invalid for extending for an unreasonably long interval. Trailer clauses operating for a period of months⁶⁶ and for one year⁶⁷ have been upheld by courts. Clauses lasting for one year,⁶⁸ five years,⁶⁹ ten years,⁷⁰ and for a perpetual duration⁷¹ have been held by courts to be unenforceable as against public policy as serving as an unreasonable restraint on an individual's capacity to earn a living.⁷²

2. *Scope of the Subject Matter.* Just as the duration of a trailer clause must be limited, so too must the scope of the subject matter covered by the clause.⁷³ Common sense instructs that an employer is not compelled to limit the clause to a specific line of products.⁷⁴ Likewise, a trailer clause that seeks to bind an employee as to any and all inventions he may create in any field whatsoever would be per se invalid.⁷⁵

Employers define the ambit of the subject matter of their trailer clauses by their business activities. Generally, employers define the sphere of their trailer clause in one of three ways. First, employers may limit the trailer clause to cover inventions relating

⁶⁵ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 894-95 (N.J. 1988).

⁶⁶ *General Signal Corp. v. Primary Flow Signal, Inc.*, Nos. 85-0471B & 86-034B, 1987 U.S. Dist. LEXIS 6929 (D.R.I. July 27, 1987).

⁶⁷ *Goodyear Tire & Rubber Co. of Akron, Ohio v. Miller*, 22 F.2d 353 (9th Cir. 1927); *Campbell Soup Co. v. Conagra, Inc.*, 801 F. Supp. 1298 (D.N.J. 1991), *vacated*, 977 F.2d 86 (3d Cir. 1992); *Universal Winding Co. v. Clarke*, 108 F. Supp. 329, 94 U.S.P.Q. (BNA) 295 (D. Conn. 1952); *contra National Cash Register Co. v. Remington Arms Co., Inc.*, 151 N.E. 144, 145 (N.Y. 1926) (stating in dicta that trailer clause extending one year beyond end of employment is offensive to public policy).

⁶⁸ *National Cash Register Co. v. Remington Arms Co., Inc.*, 151 N.E. 144 (N.Y. 1926).

⁶⁹ *GTI Corp. v. Calhoon*, 309 F. Supp. 762, 165 U.S.P.Q. (BNA) 621 (S.D. Ohio 1969).

⁷⁰ *United Shoe Mach. Co. v. La Chapelle*, 99 N.E. 289 (Mass. 1912).

⁷¹ *Guth v. Minnesota Mining & Mfg. Co.*, 72 F.2d 385 (7th Cir. 1934), *cert. denied*, 294 U.S. 711 (1935).

⁷² *GTI Corp.*, 309 F. Supp. at 773.

⁷³ *Dorr-Oliver v. United States*, 432 F.2d 447, 452 (Ct. Cl. 1970) (citing *Universal Winding Co. v. Clarke*, 108 F. Supp. 329 (D. Conn. 1952)).

⁷⁴ *Knuth*, *supra* note 57, at 300.

⁷⁵ *Id.* However, it is permissible for the employment contract to require all inventions made during the term of employment to be assigned to the employer. Robert L. Gullette, *State Legislation Governing Ownership Rights In Inventions Under Employee Invention Agreements*, 62 J. PAT. [& TRADEMARK] OFF. SOC'Y 732, 732-33 (1980).

to areas in which the employee worked or had contact. This is the narrowest scope observed in a trailer clause. No reported case has invalidated a trailer clause with a scope defined in this manner.

The second method employers have used to define the ambit of their trailer clauses is to cover all areas in which the employer operated its business at the time the employee left the employment relationship.⁷⁶ This approach is considerably broader than merely covering areas in which the employee was engaged while employed.

The third method exercised by employers in defining the sphere of their trailer clauses is to cover all areas in which the employer does business *and* all areas in which the employer may have an interest in developing business. This is the broadest possible scope for trailer clauses.

Defining the scope of the subject matter of the trailer clause according to either of the latter two methods discussed above can be difficult for employers. Problems arise when the employer holds subsidiary corporations or is a subsidiary of a larger corporation.⁷⁷ Additionally, defining areas in which an employer may have an interest in developing business is difficult.⁷⁸

⁷⁶ Gullette, *supra* note 75, at 732 n.2. The wording in Boeing's employment contract is a good example of such a reach. Boeing's employment contract covers "all inventions conceived by Employee, either solely or with others, during Employee's employment by Boeing, whether or not during regular working hours, which relate to any subject matter with which Employee's work with Boeing is or may be concerned or which relate to the business carried on by Boeing." *Id.* (emphasis added). If the clause "or which relate to the business carried on by Boeing" were not included in Boeing's employment contracts, the contracts would cover only those inventions in areas where the employee worked or had exposure.

⁷⁷ Does "related to the employer's business" mean the actual corporation for which the employee directly works, or does the phrase include parent and subsidiary corporations? If the employer defines the scope of the clause merely to cover inventions "relating to the employer's business," litigation may be the likely result due to the ambiguity of the scope. However, this ambiguity can be cured through careful drafting.

⁷⁸ The problem of defining areas in which an employer may have an interest in developing business is analogous to the difficulty surrounding the application of the extension doctrine in trademark law. Under the extension doctrine,

the owner of a well established and distinctive trademark for one product may extend that trademark to a use on a different but related product if the use of that mark by someone else on the related product would be likely to cause confusion. A merchant or manufacturer who claims the right of expansion must also show a propensity to extend its use of the mark to the related product before its use by others on such products.

Big O Tire Dealers, Inc. v. Goodyear Tire & Rubber Co., 408 F. Supp. 1219, 1245, 189

B. INGERSOLL-RAND CO. V. CIAVATTA⁷⁹ AND AN EXPANSION IN THE ENFORCEABILITY OF TRAILER CLAUSES

While the duration and the scope of the subject matter must be limited, the employer must have a protectable interest.⁸⁰ Protectable interests are typically considered trade secrets and confidential information. For example, there is absolutely no reason to burden a night watchman with an employment contract including a trailer clause. The enforcement of trailer clauses "clearly prevents the interest of the employee in enjoying the benefits of his . . . own creation on the one hand, and the interest of the employer in protecting confidential information, trade secrets, and . . . its time and expenditures in training and imparting skills and knowledge . . . on the other."⁸¹ While most courts have limited trailer clauses by narrowly defining protectable interests to cover trade secrets and other proprietary information,⁸² the New Jersey Supreme Court in *Ingersoll-Rand Co. v. Ciavatta*⁸³ significantly broadened the protection trailer clauses afford employers.

In *Ingersoll-Rand*, the employer, Ingersoll-Rand Company, employed Armand Ciavatta. At the outset of Ciavatta's employment, he executed an "Agreement Relating to Proprietary Matter,"

U.S.P.Q. (BNA) 17 (D. Colo. 1976), *modified*, 561 F.2d 1365 (10th Cir. 1977), *cert. dismissed*, 434 U.S. 1052 (1978). For example, if an employer manufactures snowmobile track belts, is the manufacturing of automobile tires an area in which the employer may be interested in expanding? *Cf. id.* at 1230-31, 1245. What about the reverse scenario? *Cf. id.* at 1230-31, 1245.

⁷⁹ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 8 U.S.P.Q.2d (BNA) 1537 (N.J. 1988).

⁸⁰ *Id.* at 892-95; *see also* *Winston Research Corp. v. Minnesota Mining & Mfg. Co.*, 350 F.2d 134, 138, 146 U.S.P.Q. (BNA) 442 (9th Cir. 1965) (stating there is no "judicial recognition of a legally protectable interest in industrial information as such"); *Dorr-Oliver, Inc. v. United States*, 432 F.2d 447 (Ct. Cl. 1970) (interpreting scope of subject matter consistent with limited protectable interests); *Universal Winding Co. v. Clarke*, 108 F. Supp. 329, 332 (D. Conn. 1952) (holding contracts restraining trade void ab initio if they "extend[] beyond any apparently necessary protection which the [employer] might reasonably require"); *Armorlite Lens Co. v. Campbell*, 340 F. Supp. 273, 173 U.S.P.Q. (BNA) 470 (S.D. Cal. 1972) (holding requiring employee to assign rights to invention not developed as result of use of employer's trade secrets or confidential information was unreasonable restraint of trade).

⁸¹ *Ingersoll-Rand*, 542 A.2d at 892.

⁸² *Id.* at 893.

⁸³ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879 (N.J. 1988).

which included a trailer clause.⁸⁴ As a manufacturing manager and quality control manager, Ciavatta participated in the manufacturing of mining tools, specifically stabilizers that secure mine shaft roofs.⁸⁵ While possessing inventive aptitude, Ciavatta certainly was not an employee hired to invent.⁸⁶

During Ciavatta's employment with Ingersoll-Rand, Ciavatta submitted thirteen patent disclosure forms concerning mining technology to upper-management.⁸⁷ Ingersoll-Rand did not pursue any of the concepts submitted by Ciavatta. As a result, Ciavatta lost all motivation to invent while employed by Ingersoll-Rand.⁸⁸

Ciavatta's employment with Ingersoll-Rand was terminated in June of 1979.⁸⁹ During the summer of 1979, after leaving the employ of Ingersoll-Rand, Ciavatta conceptualized a mine stabilizing device.⁹⁰ On August 25, 1979, approximately two months after his termination from Ingersoll-Rand, Ciavatta completed his first sketch of his mine stabilizing device.⁹¹ Ciavatta applied for a patent nine months after he was terminated by Ingersoll-Rand, and the patent was awarded in February of 1982.⁹² A second patent covering improvements on Ciavatta's mine stabilizing device was awarded one month later.⁹³

Ciavatta's invention proved to be a competitive threat to Ingersoll-Rand's mine stabilizing device.⁹⁴ Ingersoll-Rand brought suit to compel Ciavatta to assign the patent in accordance with the

⁸⁴ Ingersoll-Rand, 542 A.2d at 882. The trailer clause provided that Ciavatta would assign inventions developed

within one year after the termination of such employment if conceived as a result of and is attributable to work done during such employment and relates to a method, substance, machine, article of manufacture or improvements therein within the scope of the business of the COMPANY or any of its affiliates.

Id.

⁸⁵ *Id.*

⁸⁶ *Id.* at 880-84, 895. See text and accompanying notes 32-35 for definition and discussion of an employee who is "hired to invent."

⁸⁷ *Id.* at 882.

⁸⁸ Ingersoll-Rand Co. v. Ciavatta, 542 A.2d 879, 882 (N.J. 1988).

⁸⁹ *Id.* at 883.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ Ingersoll-Rand Co. v. Ciavatta, 542 A.2d 879, 883 (N.J. 1988).

⁹⁴ *Id.* at 883-84.

trailer clause in Ciavatta's employment contract and also sought an accounting for profits.⁹⁵ Notwithstanding finding that Ciavatta's invention neither incorporated trade secrets nor confidential information belonging to Ingersoll-Rand, the trial court held that the invention in question fell within the ambit of the trailer clause and ordered Ciavatta to assign the disputed patents to Ingersoll-Rand.⁹⁶ New Jersey's appellate court reversed the trial court, holding that:

An employee who uses no confidential information imparted to him by his employer has every right to market competitive products and otherwise to compete with his former employer. Limitations on this right, expressed in contracts of adhesion, must be strictly construed against their drafters; whether phrased in terms of direct restrictions against competition or of imposition of other restrictions having similar anti-competitive effects . . .⁹⁷

The New Jersey Supreme Court held that Ciavatta did not have to assign the patents to Ingersoll-Rand because "Ingersoll-Rand

⁹⁵ *Id.* at 884.

⁹⁶ *Ingersoll-Rand Co. v. Ciavatta*, 509 A.2d 821, 830 (N.J. Super. Ct. Ch. Div. 1986), *rev'd*, 524 A.2d 866 (N.J. Super. Ct. App. Div. 1987), *aff'd*, 542 A.2d 879 (N.J. 1988).

The trial court analyzed the trailer clause, which New Jersey courts call a holdover clause, and enforced it as "fair, reasonable and justifiable in light of the facts and circumstances of th[e] case." *Ingersoll-Rand*, 509 A.2d at 829. The trial court focused on the following eight factors: (1) the invention was related to and a direct result of Ciavatta's employment with Ingersoll-Rand; (2) Ciavatta only possessed general knowledge of the mining industry and his awareness of specific techniques was derived solely from his employment with Ingersoll-Rand; (3) Ciavatta's employment with Ingersoll-Rand exposed him to creative processes relevant to the disputed invention; (4) Ciavatta was enriched—he acquired knowledge and experience—by working for Ingersoll-Rand; (5) enforcement of the trailer clause would not be a significant deterrent to a change of employment by Ciavatta; (6) enforcement of the trailer clause would not interfere with the legitimate expectations of Ciavatta; (7) there is no evidence that Ciavatta misappropriated or trade secrets or used other confidential information; and (8) there is no evidence that Ingersoll-Rand's friction stabilizer involved trade secrets. *Id.* at 829-30. While factors seven and eight militated against enforcement of the trailer clause, the court found them to be outweighed by factors one through six. *Id.* at 830.

⁹⁷ *Ingersoll-Rand Co. v. Ciavatta*, 524 A.2d 866, 872, 3 U.S.P.Q.2d (BNA) 1120 (N.J. Super. Ct. App. Div. 1987), *aff'd*, 542 A.2d 879 (N.J. 1988).

[did] not establish[] that Ciavatta ‘conceived’ of his invention as a result of his employment at Ingersoll-Rand.”⁹⁸ However, while finding that the trailer clause was not controlling on the facts of the case, the court greatly broadened the protection available to employers through trailer clauses. The court stated:

[T]he protection afforded by [trailer clauses] . . . may under certain circumstances exceed the limitation of trade secrets and confidential information. We recognize that employers may have legitimate interests in protecting information that is not a trade secret or proprietary information, but highly specialized, current information not generally known in the industry, created and stimulated by the research environment furnished by the employer, to which the employee has been “exposed” and “enriched” solely due to his employment.⁹⁹

In refusing to define the ambit of this new protection, the court suggests that its scope is impossible to exactly define.¹⁰⁰

In expanding the interests protectable under trailer clauses beyond trade secrets and confidential information, the New Jersey

⁹⁸ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 895 (N.J. 1988).

Additionally, the New Jersey Supreme Court stated that the application of the trailer clause to this specific invention would be unreasonable because the specifications of Ingersoll-Rand’s mine stabilizing device were widely advertised throughout the industry and trade publications. *Id.* Accordingly, Ciavatta was not exposed to anything unique by virtue of his employment with Ingersoll-Rand that was unobtainable elsewhere.

⁹⁹ *Id.* at 894. *But see* *Winston Research Corp. v. Minnesota Mining & Mfg. Co.*, 350 F.2d 134, 138 (9th Cir. 1965) (stating there is no “judicial recognition of a legally protectable interest in the secrecy of industrial information as such”); *Dorr-Oliver, Inc. v. United States*, 432 F.2d 447 (Ct. Cl. 1970) (interpreting scope of subject matter consistent with limited protectable interests); *Universal Winding Co. v. Clarke*, 108 F. Supp. 329, 332 (D. Conn. 1952) (holding contracts restraining trade void ab initio if they “extend[] beyond any apparently necessary protection which the [employer] might reasonably require”); *Armorlite Lens Co. v. Campbell*, 340 F. Supp. 273 (S.D. Cal. 1972) (holding requiring employee to assign rights to invention not developed as result of use of employer’s trade secrets or confidential information was unreasonable restraint of trade).

¹⁰⁰ *Ingersoll-Rand Co. v. Ciavatta*, 542 A.2d 879, 894 (N.J. 1988). This suggestion is implied by the court’s citation of *E.I. DuPont De Nemours Powder Co. v. Masland*, 244 U.S. 100 (1917), for the proposition that “property” is incapable of being precisely defined for the purposes of trademark litigation. *Ingersoll-Rand Co.*, 542 A.2d at 894.

Supreme Court appeared to be trying to more lucidly define principles of “equity and good conscience.”¹⁰¹ Before *Ingersoll-Rand*, courts undertook an extensive equitable analysis in deciding whether to enforce a trailer clause. In its delineation of the interests protectable by trailer clauses, *Ingersoll-Rand* opened the door for a trailer clause to be fully enforceable when an employee merely works in a research and development department with a “think tank” atmosphere.¹⁰² Under *Ingersoll-Rand*, an employer can now make a persuasive case that its protectable interest vis a vis inventive employees¹⁰³ is its merely providing a job.¹⁰⁴

IV. A NORMATIVE VIEW

A. THE CASE AGAINST TRAILER CLAUSES

Trailer clauses have become boilerplate in large corporations' employment contracts.¹⁰⁵ This is true for the research and development employee as well as for the general employee whose job does not require exercising creative or inventive capacities.¹⁰⁶

To the extent that trailer clauses are boilerplate and included in general, non-inventive, employees' contracts, the clauses should be considered unenforceable per se. In these situations, these adhesive clauses are imposed upon employees and protect no real employer interest. While the enforcement of trailer clauses is not

¹⁰¹ See *Dorr-Oliver, Inc. v. United States*, 432 F.2d 447, 452 (Ct. Cl. 1970) (stating trailer clauses “are simply a recognition of the fact of business life that employees sometimes carry with them to new employers inventions or ideas so related to work done for a former employer that in equity and good conscience the fruits of that work should belong to the former employer”).

¹⁰² *Ingersoll-Rand*, 542 A.2d at 895.

¹⁰³ Note, however, *Ciavatta* was not an employee hired to invent. *Id.* at 880-83.

¹⁰⁴ It is important to note that it would be an entirely different issue if the employer were providing the employee with opportunities for continuing formal education such as paying for graduate school. Providing continuing formal education opportunities is an agreement ancillary to the general payment-for-services employment contract. An employer typically does not provide continuing formal education opportunities for its employees out of detached generosity. The employer makes such expenditures with the expectation of a return—either a direct return of capital if the employee chooses to depart the employment relationship, or an extended commitment to remain working for the employer.

¹⁰⁵ See *supra* note 53.

¹⁰⁶ See *supra* note 53.

likely to frustrate the non-inventive employee's job search or repress his salary, enforcing a trailer clause against a non-inventive employee should be considered unconscionable as a matter of law. It is axiomatic that "[t]he purpose of contract construction is to effectuate the intent of the parties."¹⁰⁷ Because non-inventive employees likely will not invent something patentable, they do not consider the effect of trailer clauses when entering into the employment relationship.¹⁰⁸ Accordingly, it can be said that non-inventive employees do not assent to the increasingly boilerplate trailer clause.

The propriety of trailer clauses is a far tougher question when one considers inventive employees, both those specifically hired to invent¹⁰⁹ and those encouraged to invent while not specifically required to engage in creative endeavors. It is here that an employee's and employer's interests are most at odds.

Unless an individual is in demand, for example, if one is a Nobel Laureate, a trailer clause will be imposed adhesively upon an inventive employee by large corporations.¹¹⁰ There is no doubt protecting trade secrets and confidential information is an important interest of employers.¹¹¹ Protecting the give and take atmosphere of the think tank¹¹² is not an interest justifying the imposition of trailer clauses upon employees because it is comparable to merely restricting competition without an ancillary rationale, something the law has never recognized as legitimate.¹¹³

Assuming *arguendo* that employers have a legitimate interest in protecting the atmosphere of the think tank, the interests of the employee and society in general far outweigh that of employers. Trailer clauses operate to restrain the burdened employee from

¹⁰⁷ *E.g.*, *Kelly v. Medical Life Ins. Co.*, 509 N.E.2d 411, 413 (Ohio 1987).

¹⁰⁸ *See supra* note 50 (discussing probability that patentable invention will be developed depends upon one's perspective).

¹⁰⁹ *See text* and accompanying notes 32-35 for definition and discussion of an employee who is "hired to invent."

¹¹⁰ *Cherensky, supra* note 17, at 621 n.117.

¹¹¹ *Cf. RESTATEMENT (FIRST) OF TORTS* § 757 cmt. b (1939) (defining "trade secret" and stating trade secret provides its owner with advantage over competitors).

¹¹² *See supra* notes 99 and 102 and accompanying text.

¹¹³ *E. ALLAN FARNSWORTH, CONTRACTS* § 5.3, at 358-59 (2d ed. 1990); *see Karpinsky v. Ingrassi*, 268 N.E.2d 751, 753 (N.Y. 1971) (stating "there are 'powerful considerations of public policy which militate against sanctioning the loss of a man's livelihood'").

fully utilizing his skills to their maximum potential and receiving compensation commensurate with that potential.¹¹⁴ This and the more severe problem of possible unemployment may cause the inventive employee's capabilities and talent to atrophy.¹¹⁵ Society should be concerned whenever valuable resources, in this case inventive employees' minds, are not being used to their maximum potential. The concern should be even greater when inventive talent is being depleted. Additionally, trailer clauses work against the public's interest in encouraging invention and technological advancement¹¹⁶ by restricting the creative endeavors of burdened employees.¹¹⁷

Protecting expenditures employers make on their laboratories does not support the use of trailer clauses. Employers' desire for trailer clause protection is understandable when the employee is a super-inventor—a Franklin, Bell, Edison, a Nobel Laureate, or, in today's context, Bill Gates.¹¹⁸ A trailer clause covering these rare employees encourages the employer to make the optimum investment in his prized employee.¹¹⁹ It is important to note that inventors of this uncommon stature have bargaining strength equal to that of their employers.¹²⁰ However, the imposition of trailer clauses on super-inventors is a contravention of the public policy of encouraging invention.¹²¹

Inventive individuals, talented as they may be, generally are not of Edison's stature. To the extent that inventive employees are fungible, trailer clauses and restrictive covenants are inappropriate. Using trailer clauses to protect mere expenditures, in essence,

¹¹⁴ Blake, *supra* note 60; see FARNSWORTH, *supra* note 113, at 359 (discussing "public interest in individual economic freedom").

¹¹⁵ See *supra* part III.A (discussing possibility of atrophy).

¹¹⁶ The public interest in encouraging invention is embodied in the Intellectual Property Clause of the U.S. Constitution. U.S. CONST. art I, § 8, cl. 8; see also POSNER, *supra* note 8, (discussing awarding of patent as powerful incentive for creation of intellectual property).

¹¹⁷ See Franklin D. Ubell, *Assignor Estoppel: A Wrong Turn From Lear*, 71 J. PAT. [& TRADEMARK] OFF. SOC'Y 26 (1989) (stating "[e]x-employees are among the front line troops in our struggle to maintain technological primacy").

¹¹⁸ Bill Gates is the founder of the Microsoft Corporation and the inventor of the Disk Operating System (DOS) used in almost all personal computers today.

¹¹⁹ Blake, *supra* note 60, at 652.

¹²⁰ Cherensky, *supra* note 17, at 621 n.117.

¹²¹ See *supra* pp. 188-189 (discussing Intellectual Property Clause and encouraging invention through granting limited monopolies).

imposes a restrictive covenant where one would otherwise not be allowed.¹²²

Expenditures on inventive employees are, in fact, simply monies spent to enable them to perform their job. Mere expenditures on inventive employees do not give rise to a protectable interest as would expenditures for the employee to obtain further formal education.¹²³ Many employers who pay for graduate training for their workers require a return commitment that the employee remain part of the employer's work force for a specified period of years or that the employee repay the money spent for the employee's education. This is a legitimate, "bargained for" contract ancillary to the general employment contract. Enforcing trailer clauses when an employer pays for an employee's education is more punitive than protective given other prophylactic measures employers have available—specifically, requiring the repayment of the money spent on the employee's education.

The strongest argument in favor of trailer clauses and, undoubtedly, the driving force behind their insertion into the employment contract, is the employer's interest in preventing fraud.¹²⁴ However, a trailer clause is not necessarily going to prevent an inventive employee from "holding back" from his employer.¹²⁵ If an employee would hold back during the term of his employment, he is equally likely to hold back during the duration of a trailer clause.¹²⁶

The rule created by trailer clauses—if the invention was conceptualized during the term of the trailer clause then the invention is the property of the employer—works to the detriment of the public interest. In addition to the public interests discussed

¹²² See *supra* pp. 198-199 (discussing how trailer clause may operate as restrictive covenant).

Additionally, protecting trade secrets and other confidential information is not adequate justification for the enforcement of trailer clauses considering such information already enjoys sufficient protection. See *infra* text and accompanying note 134.

¹²³ See *supra* note 104.

¹²⁴ See *supra* p. 198 (discussing employer's fear of fraud as motivation for trailer clause).

¹²⁵ *General Signal Corp. v. Primary Flow Signal, Inc.*, Nos. 85-0471B & 86-034B, 1987 U.S. Dist. LEXIS 6929 (D.R.I. July 27, 1987). In *General Signal Corp.*, the employee claimed to have come up with the idea for the disputed invention a mere five days after the expiration of the trailer clause. *Id.* at *11.

¹²⁶ See *supra* note 125.

earlier, there is also an anti-competition concern. Employees have a right to compete with their former employers.¹²⁷ Competitors, as long as their conduct does not give rise to a tortious interference claim, have a right to compete for the services of employees.¹²⁸ Indeed, “[e]x-employees are a considerable source of new competition and new business ventures.”¹²⁹ This is particularly true for companies whose heart and soul are creative employees—for example, computer companies in Silicon Valley.¹³⁰

B. ALTERNATIVES TO TRAILER CLAUSES

The common law has developed a series of thorough rules governing the assignment of rights in inventions arising from the employer-employee relationship.¹³¹ There is no compelling reason, other than employers’ desire to protect themselves from employees holding back, to contract around the common law with regard to rights in inventions and the employer-employee relationship. Employers’ desire for guaranteed protection against the employee holding back, when balanced against the public interests discussed earlier, does not favor the enforceability of trailer clauses. The common law’s thoughtful allocation of rights in inventions arising from the employer-employee relationship should not be disregarded.

Adhering to the common law does not render the employer impotent to deal with the inventive employee who holds back. If the employer can show that the employee must have developed the invention during the employment relationship and that the common law required the assignment of the invention, then the employer

¹²⁷ See *supra* note 31 and accompanying text (discussing employee’s right to his experience, knowledge, memory, and skill).

¹²⁸ *Orkin Exterminating Co. v. Martin*, 242 S.E.2d 135, 138-39 (Ga. 1978) (adopting standards enunciated in § 768 of Restatement (First) of Torts (1939) for determining whether competition privilege exists); *United Laboratories, Inc. v. Kuykendall*, 370 S.E.2d 375, 387 (N.C. 1988) (defining elements of tortious interference with contract).

¹²⁹ *Ubell*, *supra* note 117.

¹³⁰ *Id.*

¹³¹ See discussion *supra* part II.B (discussing common law).

would be entitled to an assignment of the patent.¹³² Additionally, allowing employers a tort cause of action for an employee's breach of a duty of loyalty would strongly discourage employees from holding back on their employers. For competitors who pilfer inventive employees, there remains a cause of action for tortious interference with contract.¹³³ It is also important to note that the employer still enjoys trade secret and confidential information protection either by common law or statute in every jurisdiction.¹³⁴

Perhaps the best precaution employers could take against employees holding back is to equitably compensate inventive employees who develop successful inventions.¹³⁵ If compensation was equitably based on the success of an invention and its profitability to the corporation, the motivation inventive employees have for holding back, foremost, reaping the monopoly prices from a successful patent, are blunted.

¹³² Cf. *General Signal Corp. v. Primary Flow Signal, Inc.*, Nos. 85-0471B & 86-034B, 1987 U.S. Dist. LEXIS 6929, at *12 (D.R.I. July 27, 1987) (finding "concept of the . . . patent must have existed in [the inventor's] mind before his employment with [plaintiff] ended").

¹³³ See *United Laboratories, Inc. v. Kuykendall*, 370 S.E.2d 375, 387 (N.C. 1988) (defining elements of tort of tortious interference with contract). The five elements of the tort of interference with contract are:

- (1) a valid contract between the plaintiff and a third person which confers upon the plaintiff a contractual right against a third person;
- (2) the defendant knows of the contract;
- (3) the defendant intentionally induces the third person not to perform the contract;
- (4) and in doing so acts without justification;
- (5) resulting in actual damage to plaintiff.

Id. However, tortious interference claims in this context are subject to a competition privilege. *Orkin Exterminating Co. v. Martin*, 242 S.E.2d 135, 138-39 (Ga. 1978) (adopting standards enunciated in § 768 of Restatement (First) of Torts (1939) for determining whether competition privilege exists).

¹³⁴ Peter B. Swann, Note, *Maryland Uniform Trade Secrets Act*, 49 MD. L. REV. 1056, 1070 n.30 (1990); John C. Janka, Comment, *Federal Disclosure Statutes and the Fifth Amendment: The New Status of Trade Secrets*, 54 U. CHI. L. REV. 334, 348 n.71 (1987).

¹³⁵ Cf. *Employed Inventors Want Part of the Payoff*, CHEMICAL WEEK, Mar. 24, 1982, at 50, 52 (discussing pittance typically paid as bonuses to employees for successful inventions assigned to their employer); David Stipp, *Lab Legacy: Inventors are Seeking Bigger Share of Gains From Their Successes*, WALL ST. J., Sept. 9, 1982, at 1 (discussing invention explosion in Japan, which by statute tied inventive employees' salaries to market value of their inventions).

V. CONCLUSION

There is a public interest in promoting invention dating back to the drafting of the United States Constitution. The common law thoughtfully developed a series of equitable rules that defined the rights employers had in inventions developed by employees. Over the last several decades, employers have taken to utilizing trailer clauses as a primary protection device. Concomitant with the increased use of trailer clauses by employers is an increased judicial acceptance of such clauses.

The thoughtfully developed common law rules offer the employer a great deal of protection while looking out for the interests of the employee and society in general. Trailer clauses abrogate the common law and eviscerate the protections for employees which the common law established in the public interest. Society's interest in encouraging invention and fostering competition mandates a judicial declaration voiding trailer clauses *ab initio*.

MARC B. HERSHOVITZ