1889

Legal Property in Intellectual Conceptions

Albert J. Coe

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For the Degree of Bachelor of Laws—

LEGAL PROPERTY IN INTELLECTUAL CONCEPTIONS

Albert J. Coe

CORNELL UNIVERSITY SCHOOL OF LAW

-1889-
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The doctrine of a property right in intellectual conceptions is the latest refinement of the idea of property; and it is even now not universally accepted. Among the nations of antiquity and of the Middle Ages it seems not to have been recognized; the munificent patronage so often in those times accorded to literature and the arts being, as the name imports, a benefaction rather than a just tribute to an established right.

The development of this last property conception may best be observed by first tracing its growth in England.

In order to stimulate trade and advance commerce the early kings often granted exclusive rights to certain persons to engage in the importation and sale of specified articles of merchandize; and sometimes the ex-
exclusive right to trade with certain foreign states.

The granting of these privileges was a prerogative of the crown; and, as such, came to be greatly abused. It was used almost solely to advance the royal interest; though occasionally, as in the case of the exclusive rights and patents in early Americal colonial history, it was based upon a wise public policy. Nearly every trade was pursued under these grants, which also assumed in time the form of protection to useful inventions.

The abuse of this power under the Tudors became unendurable; and finally, in the reign of Elizabeth, the House of Lords introduced a bill for its restraint. The queen, wishing to suppress legislation on the subject, proposed a compromise; but before it was effected she died. Her successor, James the First, carried the abuse to still greater excess; and at last, in
the twenty first year of his reign, a statute was enacted known as an "Act for the Suppression of Monopolies", which abolished this power, except, for a limited period in the case of inventions in manufactures. Thus, in recognition of its value, was established the principle of a patent right. This was in 1623, and the Act remained without change until the 5 and 6 of William the Fourth, Chap. 83, 1835. In fact its establishment and growth were slow; and the importance of the statute was not at first perceived. Blackstone in his Commentaries sums up the law on this subject almost in a single sentence. During the reign of Victoria legislation has been more active, and many important amendments have been made; notably The Patent Law Amendment Act, of 15 and 16 Victoria, Chap. 83, 1852; the Act changing the seal, 1877; and the late revision of 1883.
The tendency of this legislation has been decidedly in favor of the patentee; the noteworthy feature of the Act of 1883 being a reduction of the fees, which were originally levied for purposes of revenue. The copyright laws of England originated at a later date; although licenses were granted to publishers as early as 1504, when the first Royal Printer was appointed. This however, merely protected the printer, not the author. Literary "piracy" was carried on without redress until the enactment of the famous statute of 4 Queene Anne, for the "Encouragement of Learning." Many enactments have followed; and at present an author may obtain a copyright for his production covering a term of forty two years; or, for his lifetime and seven years thereafter. If the publication take place after the death of the author, a copyright for forty two years may be obtained.
America is the next nation, in point of time, to recognize by law this property; but, in order better to base our conclusions, we will glance briefly at the patent and copyright laws of other countries.

France passed her first act upon the subject of patents in 1787. Her patent laws are similar to those of The United States, except that the fees exacted are much higher. The original expense of obtaining a patent is about one hundred and twenty dollars, with an annual tax of twenty dollars, for a term of fifteen years, which is the duration of the patent. The French copyright laws are the most liberal in Europe.

Germany first enacted a patent law in 1815. As at present administered, anyone, inventor or not, may procure a patent. Thus the rights of the patentee are not wholly secured. The cost of obtaining a patent is very considerable, amounting to seventeen and one—
half dollars the first year; double the amount the second year; with a like addition yearly for fifteen years when the grant ceases. Not so many patents are issued as in France. The copyright laws of Germany are very liberal.

Russia enacted patent laws in 1812-15. They are similar to the American laws, but render patents more expensive. A three years' patent costs one hundred and sixty dollars; one for five years two hundred dollars; and one for ten years four hundred and twenty dollars.

The patent laws of Belgium, adopted in 1816-17 are much more liberal than those of the other continental states.

Between 1820 and 1845 all the other nations of Europe, excepting Switzerland and Turkey, enacted laws
of this class.

Keeping in mind the above dates it will be seen, as before stated, that at the time of our establishment as a nation, England stood alone in acknowledging by statute that there were property rights as real and as equitable in the products of mind as in those which assumed a tangible and visible form. With the single example of England before them, does it not speak highly of the wisdom of the framers of our Constitution that they provided so liberally for the protection of this right, the embodiment of a principle so subtile as scarcely to have been recognized in the body of European jurisprudence. Among the provisions of the Constitution is the following:

"The Congress shall have power... To promote the progress of science and the useful arts, by securing for limited times, to authors and inventors, the
right to their respective writings and discoveries."

Thus we find that our patent law is based upon a positive declaration; while in England it was merely an exception to a prohibitory statute.

(Owing to the breadth of the subject, only the Law of Patents will hereafter be noticed.)

The first Act under the provisions of the Constitution was passed April 10, 1790. It provided that "Any person who has invented or discovered any new or useful art, machine, manufacture, or any new or useful improvement thereof, may obtain a patent therefor."

In 1793 the provision was amended, and "composition of matter" was inserted after "manufacture."

There has been subsequent legislation on this branch of the Constitution; but it has been with reference to minor details, the statute of 1793 being substantially the one in force to-day.
In the English law the word "manufacture" designates anything for which a patent may be issued. The meaning of the term has thus been greatly enlarged so as to include those inventions that are not strictly manufactures, but should nevertheless be equitably protected. American law, on the other hand, endeavors to provide terms that will cover every case. It has been necessary, however, that these terms, and, in fact, nearly every word of the constitutional provision, should receive judicial interpretation; and if we would ascertain the liberality of our patent laws it is necessary that we become familiar with the judicial construction of these provisions. These will be treated, so far as may be, under the following heads:


II. To Whom Letters Patent may be issued.

III. The Extent of Letters Patent.
IV. The Duration of Letters Patent.

V. The Subject-Matter of Letters Patent:
   a. Art
   b. Machine
   c. Manufacture
   d. Composition of Matter.

VI. Invention or Discovery.

VII. Novelty.

VIII. Prior Use.

IX. Two Years Public Use.

X. Prior Invention.

XI. Utility.


The term "letters patent", employed to designate the instrument which is issued to a patentee in recognition of his right, has descended to us from the early history of the mother country, though bearing little of its former meaning, "a grant of a monopoly." Under
our law it assumes the nature of a contract between the government and the individual, whereby the government recognizes the right of an individual, as against all other individuals, to the ownership and control of his own conceptions, and guarantees him protection for a limited time, if he, as consideration therefor, will make known his invention, and will surrender it at the expiration of the time limited, to the commonwealth.

The provision is thus two-fold in its nature: Beneficiary, giving the inventor an exclusive right to sell and use; and Prohibitory, forbidding an unauthorized use thereof by others. Though this is the product of positive law, yet the patentee possesses a property right in the subject matter as real and as absolute as man acquires in anything that is the product of his toil.
II. To Whom Letters Patent may be issued.

Any person, citizen or alien, being the original inventor, registered assignee, executor or administrator of the original inventor, may obtain a patent. An employee in the Patent Office can take only by inheritance.

A patent may be granted to two or more persons if it was jointly invented by them; but a patent granted to two or more when only one invented is void. So, also, is a patent granted to one person, where several participated in the invention. Mere mechanical labor will not entitle a party to be joined; he must invent.

III. The Extent of Letters Patent.

The grant of letters patent extends over all the possessions of the United States, and to its vessels upon the high seas, or wherever they are.

Gardner vs Howe. 2 Clifford 464.

Foreign ships within our waters may use the article pat-
ent on board; but they must not make or sell it.

Brown vs Duchesne 19 Howard 198.

IV. The Duration of Letters Patent.

The duration of all letters patent granted in The United States is seventeen years, with the exception of patents for designs, which are for three and one-half, seven, or fourteen years, at the option of the applicant; Patents obtained here for inventions made and patented abroad expire at the time of the expiration of the foreign patent, the whole term not being more than seventeen years.

The re-issue of a patent in a foreign country does not secure a re-issue of the patent here.

Bate Refrigerating Co. vs Gillett 18 Fed. Rep. 553

V. The Subject-Matter of Letters Patent.

a. Art.

The term "art" has a much narrower meaning under patent
law than in popular use. As applied to patents it is used as synonymous with "process", which may be defined as "An operation performed by rule to produce a result not entirely mechanical". It will be seen that the term "process" is not used in its generic sense. Art and "process", in this sense, are liable to be confused, and are often mistaken for each other. Formerly it was almost impossible to tell whether a case fell within the one term or the other; but we have now four cases which fully illustrate the difference and, if used hypothetically, will enable us to decide with certainty.

Mc Clurg vs Kingsland 1 Howard 212
Howry vs Whitney 14 Wallace 620
Tilghman vs Proctor 102 U. S. 707
O'Reilly vs Morse 15 Howard 112

Three of these cases,—those testing the patents issued to Harley, Whitney, and Tilghman,—were decided in favor of the patentees, on the ground that they covered a pro-
cess; while the horse claim was defeated because it was for a principle.

The rule deducible from these cases is as follows:

A patent for a process is a patent for the combined use of all the laws of nature described and utilized in that invention; whereas a principle is one of those fundamental laws. If a patent could be obtained for the discovery of a law of nature, the chief end of patent law—the stimulating of investigation—would be thwarted by the tying up of the newly discovered natural principle.

b. Machine

One of the best definitions of a machine is given by Judge Grier in his opinion in Corning vs Burden 15 Howard 267.

He says: "The term 'machine' includes every mechanical device and combination of mechanical powers and devices to perform some function, and produce a certain result or effect." He still further distinguishes between a
machine and a discovery by saying that the former is invented and the latter discovered. For instance, a person might discover a new and useful method of dyeing; and then, by inventing a machine to facilitate the work, obtain a patent for each.

c. Manufacture.

This term has been found almost as difficult of interpretation in our patent law as in that of England; here the tendency being to abridge, and there to enlarge the meaning. The following definition is drawn from the decision in Cornel vs Kinne, Webster's Patent Cases, 517:

"Manufacture, as the subject of a patent, may be any new combination of old materials constituting a new result or production, in the form of a vendable article, not being machinery."
d. Composition of Matter.

This term includes medicines, compositions used in
the arts, etc., where they are made of substances suit-
able for sale separately.

The patent may be for the composition, the article
produced, or the process of compounding it.

A combination of the four definitions above given
covers the entire field of patentable inventions and
discoveries. Simple as they seem, they are terms of a
broad and far-reaching character; requiring years of
searching investigation to place them even upon the dis-
puted footing they now hold.

VI. Invention or Discovery.

Having ascertained the extent of the subject-matter
for which patents may be granted, we will now see what
is required of the applicant to entitle him to a patent.
First: He must invent or discover something included within the meaning of one or the other of the terms "Invention" and "Discovery." These terms have nearly the same meaning given them by the courts, and are often used interchangeably. Mr. Walker in his work on patents terms them synonymous; but the distinction established in Corning vs Burden - alluded to above - and discernible in other decisions, should be maintained.

A chemist may vary the proportions of two or more ingredients and mingle them again and again, until finally, a certain combination being obtained, they unite, and a new and useful substance is discovered. Did he invent anything? Did he not rather discover that certain chemicals, mixed in certain proportions, would produce a certain result?

In order to determine what is "Invention" or "Discovery" we have again to recur to the decisions of the
courts, and we find that it is easier to draw the line by considering what may not be called by those names, rather than by attempting a positive definition. As was before remarked—under the topic "Art"—an abstract principle cannot be patented. Only a practical embodiment of it in some machine or method rendering it available and useful, is patentable. The case of Silsby vs Forte 20 Howard 378 seems to me to antagonize this doctrine. Forte invented a method of regulating the draft of stoves by utilizing the expansive properties of metals, when subjected to different degrees of heat, and claimed a patent for the utilization of these properties for this purpose. The claim certainly was not confined to the mechanism he had devised, but covered the principle, and precluded experiment in this direction during the term of his patent. I am quite unable to distinguish the legal prin-
principle involved in this case from that in the 8th claim of Morse, which was for all modes of communicating at a distance by signs made with the use of electricity. This claim was disallowed because it covered the monopoly of a principle. The expansion and contraction of metals when subjected to heat is as much a natural principle as the expansive property of steam; and Watts might as justly have patented his discovery as could Forte in this instance.

An effect alone is not patentable; as, for instance the measurement of time. It is only the new mode or appliance for producing the effect that may be patented. If the effect be obtained by the use of a previously known appliance, though it may heretofore have been used for a different purpose, no patent can be obtained; for the appliance is regarded as having been designed for every purpose for which it can be used.
An illustration of this principle is found where the application of ether, in surgery, was held not to be patentable, as it was merely the application of an old agent, by old means, to an old object. The effect alone was new. Means, new or old, may be patented or used to the exclusion of all others in the application of new properties to produce new results.

vs Higgins 10 U. S. 591

It is the design of the patent law to stimulate invention in new fields and to advance the useful arts. If patents were granted for unimportant improvements and alterations they would constitute a system of monopolies as baneful as that under the Tudors. Conscious of this, the courts have guarded carefully the administration of these laws; and they have held that the making of a device such as any skilled mechanic could produce when needed does not render it patentable.

Corn Planter Patent 23 Wallace 232
Judge Nelson held that the mere substitution of material of superior quality would not warrant a patent.

Hotchkins vs Greenwood 11 Howard 263

This decision was followed in

Ex parte U.S. Appeal cases, D.C. 1859, where the substitution of a jewel for a glass in a machine, to prevent friction, was held to be not patentable.

Mere improvement in workmanship, also, is not patentable.

Buzzell vs Fifield 7 Fed. Rep. 467

The distinctions drawn in cases of this character, however, are very nice; a dissenting opinion having been rendered in the case just above cited.

The holding of the courts at present seems to be that if the substitute improves the result, or if the material substituted was not before known, a patent may be secured.

Neilson Case- Webster's Patent Cases 14.
It is not invention to change the degree, substitute equivalents, or omit some part, unless the said change, substitution, or omission produces a new result.

Smith vs Nichols 21 Wall. 115

Aggregation, to be patentable, must accomplish a new result, peculiar to the combination, and resulting from it alone. The parts may act separately or simultaneously; but each must be essential to the combination.

Hailes vs Van Wormer 20 Wall. 353

Novelty may usually be detected by an application of these rules; but, if they fail, it has been held in England—followed to some extent in this country—that a device which has gone into general use, and has displaced other devices, before employed for a similar purpose, may be deemed patentable.

VII. Novelty.

Novelty, another requisite for constituting a pat-
entable invention, has a broader meaning under the patent law than is ordinarily assigned to it. A study of cases which fall without the definition of actual newness, and are yet patentable, is the only means of arriving at a definition of the term, as used in this branch of the law.

Foreign Patents and Publications.

Anything of a patentable nature that has not been patented abroad, nor a description or plan of which printed or published abroad, may be patented in this country if it possess the other requisites necessary to a patent; and this, though it may long have been known, provided the patentee's idea was original with himself.


The publication or patent abroad must have preceded the date of the invention in this country; not merely the date of the issuing of the patent.

Elizabeth vs Pavement Co. 7 Otto 126
An abandoned application is not considered as such publication.

8owes vs Mc Neal 5 Bann & Ard 77

The previous existence of an unpublished drawing or a model, though the thing invented is fully represented therein, will not invalidate a patent afterwards secured. The reason may seem technical, as it is based upon the ground that the knowledge or use of a drawing or model is not the knowledge or use of the thing itself. It is doubtless also based upon the ground of public policy for, if a patent could be defeated in this way, an opportunity would be given for fraud and perjury.

VIII. Prior Use.

An invention, to be patentable, must not have been known or used by others in this country, previous to the application for the patent, although it may have been known and used for an indefinite period elsewhere; pro -
vided the inventor here was ignorant of such use.

Mr. Walker, in his lectures on this subject, gives a very interesting case recently decided in accordance with this doctrine. A patent was issued for a window stay or fastener, and, a suit having been instituted under it, the defence set up that a similar stay was in use, for the same purpose, in the church at Wittenberg on the door of which Luther nailed his "Theses". On plaintiff's proving that he had no knowledge of such prior use, the patent was sustained.

The prior use must be a public use; though in Allios vs Stowell 9 Fed. Rep. 304 Judge Dyer says: "Of course the familiar rule is that where it is claimed that a patented device is anticipated by another, and that there has been a prior use, it is necessary to show, not perhaps that the anticipating device has been actually used, but certainly that it is
capable of practical and successful use." There seems to be little support for this statement in the decisions of the court.

The length of time an invention may have been used is immaterial. It may have been used but once, and by a single person; yet, if in public, with an idea of pecuniary profit and not wholly for experiment, the inventor is presumed to have abandoned it to the world.

Parker vs Holme 1 Fish Pat. Cases 44
Colt vs Mass. Arms Co. 1 Fish Pat. Cases 108

Two inventions may be very like; but if constructed with different objects in view, one is not held to have anticipated the other.

Colburn et al vs Schroeder et al 8 Fed. Rep. 519

IX. Two Years Public Use.

It is often advisable that some test of the efficiency of a design or process should be made before a
patent is obtained; and it may be that the design or process is of such a nature that experiments could not be carried on without making it public; as, for instance the testing of the durability of pavement compositions.

The statute of 1790 contained the phrase "not before known or used"; and from the wording of this phrase it was impossible to determine whether this meant "known or used" prior to the invention, or prior to the application for a patent. The courts, however, held it to mean prior to the application.

Pennock vs Dialogue 2 Peters 1

The statute of 1793 removed all doubt upon this point by expressly inserting the words "before application." This rule was construed literally; and was followed in every case but one. The exception was made where the invention was unlawfully taken away, and used without the knowledge or consent of the inventor.

Pennock vs Dialogue 2 Peters 18
The Act of 1836 did not change the law; but, like the statute of 1793, incorporated in it the decisions of the courts. The Act of 1839 passed over this matter; but the Act of 1870, remedying the defects, in this respect, of former acts, granted that if an invention had not been in public use, or on sale, for more than two years, a patent could be obtained. This is substantially the law at present; and it would seem plain enough did we not find that it has proved a source of contention. The first question to arise under the Act was Does public use mean use by the public, or use in public? It was held to designate use in public.

Henry vs Providence Tool Co. 14 Off. Gazette 858.

But it was afterward held that if the use was merely experimental, it would not invalidate the claim, even though it had covered a period of more than two years.


Campbell vs New York City 20 Off. Gazette 1817.
In order to defeat a patent, an invention in public use must have been perfected; and the same, in the eye of the law, as that patented.

It should also be remembered that often an inventor applies again and again for a patent before receiving it and, in view of this fact, it has been held that if he uses reasonable diligence, even two years will not bar him.

Smith vs O'Connor 4 Official Gazette 653

Prior Invention.

As this is a subject, similar in many particulars to "Prior Use", it is appropriate to treat it in this place. It differs from the latter in that when Prior Use is pleaded as a defence, it is not material whether the use was by the inventor or otherwise; while in Prior Invention it is the very essence of the patent that the claimant was the inventor, and always intended
to procure a patent.

Again, in Prior Invention it need be only a well evidenced conception; provided this conception be followed by a successful reduction to practice, and either a patent applied for, or the invention brought into public use with reasonable diligence.

Redfield vs Hunt 1 Mason 362

It is not necessary that the invention should have been reduced to practical form, if the inventor was using reasonable diligence to accomplish this object.

Cox vs Griggs 2 Fish Pat. Cases 74
Colt vs Mass. Arms Co. 1 Fish Pat. Cases 108

Judge Ingersoll in Ellithorpe vs Robertson seems to have held a different opinion; but if we apply his remarks to the case in hand, we find that the plaintiff did not use reasonable diligence; and that it was largely on this account that the adverse decision was rendered.
Judge Lowell held that the prior invention must have attained a practical result; which is contrary to the decisions on this question rendered generally by the courts. The rule, as it appears from the cases cited, is, that he who first conceives the idea, if he uses reasonable diligence, and succeeds finally in attaining his object, is prior to him who invents later; even though the later inventor may complete and perfect the invention sooner.

"Conception", Reduction to Practice" and "Reasonable Diligence."

Conception means not only the knowledge that it would be advantageous to produce a certain thing, but also a distinct and clear perception of the end to be
attained, and the means to that end.

Woodman vs Stimpson & Fish Pat. Cases 105

It was once held that drawings and models, if exact representations of the thing afterward produced, were sufficient to satisfy the requirement of Reduction to Practice. But in Ellithorpe vs Robertson (super) a different rule was laid down, and it has since been followed; namely: There must be a working machine made; but it need not be reduced to actual public use if a patent be applied for with due diligence.

Many questions may arise under the term "Due Diligence"; and usually in deciding this question reference is had to the complexity of the machine, and the illness, or even the poverty, of the inventor. The provision is never allowed to work injustice to the inventor.
XI Utility.

In order to be patentable inventions must be useful; but the degree of usefulness is not prescribed. They are considered with reference as to whether or not they are frivolous, or injurious to the well-being of society. The absolute utility may be very small; but the question of comparative utility arises only when the question of infringement is under discussion, and when the question is as to whether a certain patented device and another one complained of are substantially identical. The question of comparative utility is difficult of determination. If the change from the prior invention has been slight, and the utility increased but little, there is not much likelihood of establishing a substantial difference. But if the apparent change is considerable, and the increase in utility noticeable, it is
generally satisfactory evidence that the objects compared are not alike.

This review of the patentability of inventions as provided for in our Constitution, acted upon by Congress and interpreted by the courts, will not completely attain the object for which it was written if it does not make manifest the dual nature of our law; its liberality toward the inventor, and its careful watchfulness for the general weal. The inventor is allowed the benefit of every doubt, and his circumstances are taken into account; but otherwise he must use reasonable diligence in giving his conceptions to the public. He cannot establish a monopoly of a natural principle and thus preclude chances of improvement by subsequent investigators.

Our system of patent laws is not in any sense a sys
tern of rewards, but one of justice. A person who ac-
quires property by devise, by loan, by traffic, or by
the labor of his hands, is protected in the possession
and enjoyment of it. But how much above the heir, the
banker, the merchant, or even he who delves in the soil
of the earth and forces her to yield her increase, is he
who delves in the depths of the mind and brings forth
for the comfort and happiness of men inventions that
will be a blessing forever. It is this inventive fac-
culty, fostered and stimulated by the liberal protection
of our laws, that has made us one of the first of the
manufacturing, as well as the first of the agricultural
nations of the globe; that has elevated and dignified
the lives of our laborers and surrounded them with ob-
jects of use and comfort; and that has given to us, as:
ation, that solid basis of material prosperity upon
which must be built whatever of greatness we attain to.