FIREBALL GAS TANK & ILLUMINATING COMPANY *v.* COMMERCIAL ACETYLENE COMPANY AND PREST-O-LITE COMPANY.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

No. 13. Argued October 22, 1915.—Decided November 29, 1915.

A process may be independent of the instruments employed or designed to perform it, and the expiration of a foreign patent for the one may not affect the United States patent for the other.

In this case *held* that the patent of complainants for acetylene gas tanks is distinctly for an apparatus while the foreign patents which have expired and are claimed by defendant to be identical are explicitly for methods.

There having been conflicting opinions of different Circuit Courts of Appeal on questions of invention and infringement as well as the effect of expiration of foreign patents *held* that there was no abuse of discretion in the granting of an interlocutory injunction, but that while there is no identity between complainants' patents and expired foreign patents pleaded by the defendant, all other questions should be reserved for the trial of the cause.

THE facts, which involve the propriety of issuing an interlocutory injunction in a suit for infringement of patents for acetylene gas apparatus, are stated in the opinion.

Mr. John H. Bruninga for petitioners.

Mr. John P. Bartlett for respondents.

MR. JUSTICE MCKENNA delivered the opinion of the court.

By this writ there is brought here for review a decree of the Circuit Court of Appeals affirming an order for an

interlocutory injunction against the infringement of certain letters patent.

The Circuit Court of Appeals considered the question in the case to be the narrow one whether the injunction was properly granted.

Petitioners, who were defendants in the District Court, attack not only that conclusion but contend for the larger relief of a dismissal of the bill.

The Acetylene Company is the owner of letters patent No. 664,383 granted December 25, 1900, for "apparatus for storing and distributing acetylene gas." The Prest-O-Lite Company is the exclusive licensee as to the use of the invention on automobiles, carriages and other movable vehicles. Defendants manufacture and sell what is known as the "Fireball Gas Tank"; Soloman is the president of the defendant.

The bill was filed August 17, 1911, and a motion for a preliminary injunction was made. It was heard upon the bill, exhibits, answer, replication and affidavits. The Circuit Court granted the injunction and the order was affirmed, as we have said, by the Circuit Court of Appeals. The court considered that the question before it was whether the trial court had exercised a sound judicial discretion in granting the injunction, and deciding that the trial court had done so, affirmed its action and refused to dismiss the bill, as it was urged to do. Opinion was reserved upon all of the questions which the record presented except the question of the abuse by the trial court of its discretion in the issue of the injunction, as the court said, "until the affidavit stage of this proceeding shall have been passed, until the rights of the parties shall have been tested by the production, hearing and cross-examination of their witnesses according to the salutary and searching practice of the common law, and until the court below, at the final hearing, has investigated and decided the issues these parties raise in

the light of that testimony and of the argument of counsel."

Whether this prudence should be imitated or a broader scope of decision be made we will determine upon a consideration of the case.

The bill is in the usual form and set forth the respective rights in the patent of complainants, respondents here (we shall refer to them as complainants and to petitioners as defendants), and its infringement by defendants.

The defendants answered separately and each denied infringement and averred that by reason of the proceedings in the Patent Office the patent is limited in its scope to the subject-matter precisely as claimed and defined by the claims of the patent; that the prior art was such that the patent is devoid of novelty and patentable invention; that it is destitute of utility; that it does not comply with the statutes in precise difference from what preceded it, nor sufficiently describe the method of operating it and the process of making, constructing and using it; that complainants have a remedy at law and the court has no jurisdiction; and that the alleged inventors of the patent were not the first and true inventors of it. Certain United States, British and German patents are alleged as ante-dating the invention and certain publications are represented as having disclosed it.

Public uses of the patent are also circumstantially alleged and profits are denied. It is further alleged that the invention of the Claude & Hess United States patent No. 664,383, which is in suit, was patented to George Claude and Albert Hess by British patent No. 29,750 and that the latter had expired or ceased before the issue of patent No. 664,383; that the term of the latter expired not later than June 30, 1910; that a French patent to the same patentees expired June 30, 1911, and that therefore patent No. 664,383 also expired not later than said date; and so with the German patent and other patents.

The first consideration which presents itself is the identity of the United States patent with the foreign patents which by their expiration, if they have expired, have terminated the United States patent.

The letters patent in suit describe the invention as "An Improvement in Apparatus for the Storage and Distribution of Acetylene Gas." Drawings illustrate the patent, and it is stated that it "is designed to carry out a process of storage and distribution involving the employment of a chamber charged with a solvent of the gas to be stored and into which the gas is forced under suitable pressure," and that the apparatus is to be charged at a central station and transported to the place of use as a complete article or package. The apparatus is described and illustrated and it is said that it, embodying the invention, consists essentially in a closed receptacle containing acetylene gas in solution and having an outlet for the gas so positioned as to be normally above the level of the solution and adapted to be provided with a burner or connected with a pipe system for the final use or distribution of the gas which escapes from the solution owing to the diminution of pressure when the outlet is opened. It is constructed and arranged "for the charging process as well as for the discharging process." Inlet and outlet passages are provided with suitable valves or cocks to close the same, and it is desirable, it is said, for the proper operation of the burners supplied in this way that the gas should be delivered thereto under a substantially uniform pressure only slightly above the atmospheric pressure, and for this purpose means are provided. A reducing valve is shown as the means interposed between the interior of the receptacle which contains the dissolved gas and the outlet from which the gas is allowed to escape.

Claims 1, 2 and 5 are those with which we are concerned, and are as follows:

"1. A closed vessel containing a supersaturated solu-

tion of acetylene produced by forcing acetylene into a solvent under pressure, said vessel having an outlet for the acetylene gas which escapes from the solvent when the pressure is released or reduced, and means for controlling said outlet whereby the gas may escape therethrough at substantially uniform pressure, substantially as described.

"2. A prepared package consisting of a tight shell or vessel; a solvent of acetylene contained within said vessel; and acetylene dissolved in and held by said solvent under pressure and constituting therewith a supersaturated solution, the package being provided at a point above the solvent with a reducing valve, substantially as and for the purpose set forth.

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"5. As a new article of manufacture, a gas package comprising a holder or tight vessel; a contained charge of acetone; a volume or body of gas dissolved by and compressed and contained within the solvent; and a reducing valve applied to an opening extending to the interior of the holder above the level of the solvent, substantially as set forth."

It is manifest, therefore, that the invention is of an apparatus designed to make use of the property of acetylene and other gases of solubility in a liquid in accordance with the law of solution (Henry's law), which is that the amount of gas absorbed by any liquid is proportioned to the pressure exercised upon the gas. Acetone is mentioned in claim 5 as a solvent.

We may now turn to the various patents whose expiration, it is contended, terminates the United States patent.

The law is (Rev. Stats., § 4887) that "every patent granted for an invention which has been previously patented in a foreign country shall be so limited as to expire at the same time with the foreign patent, or, if there be

more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years."

The question then is one of identity between the United States patent and the foreign patents. The first of the latter relied upon is the British patent to Claude and Hess of 1896. The title is "An Improved Method of Storing Acetylene for Lighting and Other Purposes." The specification states:

"This invention relates to an improved method of storing acetylene, for lighting and other purposes, in a small volume in order that it may be supplied in portable form to the customer, and it consists in dissolving the acetylene under pressure in certain liquids, the effect of pressure being to increase the solubility of the acetylene and so enable a considerable quantity of acetylene to be stored in a small volume in readiness to be supplied for any purpose for which it may be required.

"Liquefied acetylene occupies the least volume but the pressure is very high and may become excessive should the critical temperature (37° .5) of acetylene be accidentally exceeded. On the other hand simple compression of the gas enables dangerous pressures to be avoided, but the quantity which can be stored in this way is too small. For these reasons we avail ourselves of the great solubility of acetylene in certain liquids, and increase this solubility by pressure, and this method of storing acetylene gas is the Invention which we hereby broadly claim as our Invention, whatever may be the liquid employed, the kind of apparatus used, or mode of operation."

Examples of liquids which may be employed as solvents are given. Among these are mentioned "alcohols" and "particularly acetones." It is stated that mixtures and combinations of these bodies vary their solvent power, and of this property the patentees said they availed themselves. And further that the solvent power increases with

pressure and the solution of the gas in a liquid is the principle of the invention.

The process described as carried on, though subject to modifications, is as follows: the gas is dissolved in the liquid chosen and the "solution under pressure, however obtained, is filled into a receiver of metal or of glass (such as used for soda-water) capable of resisting the pressure employed. The receiver has a cock and the necessary adjuncts for connection, directly or through an expansion chamber, with the appliances in which the gas is used by the consumer, the substitution of charged for empty receivers being readily effected. The storage receivers may vary in dimensions from a small portable, to a large fixed gas-holder."

The claims describe the method and invention to be the utilization for the purpose of storage, in a small volume, of large quantities of acetylene gas, of the solubility of the gas in certain liquids by the application of pressure and the novel application as a solvent of acetylene under pressure for the purpose of storage, transportation, and utilization for industrial purposes; and the employment (claim 6) of a receiver containing a liquid charged with acetylene under pressure and from which the acetylene is evolved when required for use.

Defendants have fixed on claim 6 as establishing identity, and the British law of patents is relied on. *British United Shoe Machinery Co.* v. *Fussell & Sons, Ltd.*, 45 P. R. C. 631. The argument is that not only a receiver is claimed but a receiver of the exact or equivalent kind described in the United States patent. Counsel say: "Evolving gas from a receiver in which the gas is under pressure necessarily implies an outlet, an outlet necessarily implies a valve and a valve necessarily implies a control of the escaping gas." They say further, quoting the cited case: "'A man must distinguish what is old from what is new *by* his claim, but he has not got to distinguish what

is old from what is *new* in his claim.'" Applying the principle and asserting that the devices described in the United States patent were old it is contended that they would be implied as necessary elements of the claim.

Taken at its full import the argument would seem to establish that there could be no patent for an apparatus to execute a process if it (apparatus) were a combination of old elements. In many cases, therefore, the argument would confound process and apparatus, but it is established that a process may be independent of the instruments employed or designed to perform it. They may be independent or they may be related. "They may approach each other so nearly that it will be difficult to distinguish the process from the function of the apparatus. In such case the apparatus would be the dominant thing. But the dominance may be reversed and the process carry an exclusive right, no matter what apparatus may be devised to perform it." *Steinmetz* v. *Allen*, 192 U. S. 543, 559. However related they may be, to which may be assigned dominance may be important in considering the patentable novelty of either or, it may be, the infringement of either, but not whether one has expired because the other has. *Leeds & Catlin* v. *Victor Talking Machine Co.*, 213 U. S. 301, 318. The various questions thus arising may indeed have complexity (*Risdon Locomotive Works* v. *Medart*, 158 U. S. 68), but they must not be confounded.

A great deal of what we have said applies to the German patent. Its claim is for "the employment of liquids charged with acetylene under pressure for the purpose of utilizing acetylene for illumination, motive power, heating and the like, characterized by acetylene being absorbed under pressure by a suitable liquid and the liquid saturated with acetylene being preserved or contained in suitable vessels, from which the acetylene gas can be supplied for use, a pressure regulator being preferably interposed."

This claim is preceded by a lengthy explanation (too lengthy to quote) setting forth the properties of acetylene and its absorption by certain liquids and the dependence of the amount of absorption upon pressure and the use of such properties and pressure for storing and utilizing the gas. It is said, "The vessels for holding the liquid saturated with acetylene must be provided with a cock or valve from which the gas escapes according to the diminution of pressure which occurs, and can then be used for the customary purposes." And an apparatus is described, "with whose aid the storing process can be carried into practice." Care is taken to mention "that the process is in no way limited to the apparatus described and shown." It is clear, therefore, that the process and the described vessel of storage are separate and that the invention is for the former. An apparatus was mentioned in display of the utility of the process. See *Tilghman* v. *Proctor*, 102 U. S. 707. It was not the intention to claim a particular form of device and secure a patent for it.

The title of the French patent is "A System of Storing Acetylene." And it is said that the object of the "invention is a system of storing acetylene whereby acetylene to be used for any purpose whatsoever, especially for lighting, may be enclosed in a restricted space and easily transported."

A description of the process is given and the properties of the gas and its solvent which make the law of the process. And it is said the solution under pressure obtained by the means described, "or by any other means, is placed in a metal recipient (or a glass recipient, like seltzer water siphons) susceptible of resisting the pressure employed. The recipient is provided with a faucet and the necessary fittings to enable it to be connected, either directly or by means of an expander, with the apparatus of consumption at the house of the consumer."

The claims were:

"1. For the storage of large quantities of acetylene in a small space, the application of the solubility of this gas in certain liquids, using pressure for the purpose of increasing the amount of gas dissolved per unit of volume of the liquid, as described above;

"2. For the purpose of effecting the solution under pressure of large quantities of acetylene in a small volume of liquid, the use of methods and apparatus employed to cause the solution under pressure of other gases in other liquids, especially of carbonic acid in water."

There were certificates of addition to the patent, the first of which sets forth the advantage of mixing the liquid with a porous body capable of absorbing it. "An expedient and practical form of accomplishing this" is set forth in the second certificate. The third certificate of addition connects the patent "with a safety appliance to be adapted especially on recipients where the acetylene is dissolved in an appropriated liquid, such as acetone, according to the process described in" the patent.

The contention is that the patent is for a "system," not for a "process or method," and that besides the "'Resumé'" or claims of the first patent especially refer to both "'method and apparatus'" and that "the certificates of addition, especially the last two, unquestionably are for the apparatus, namely, the gas tank."

We think the contentions are untenable. The distinction between system and method is too subtle, and, besides, it is clear that the patentee considered the words as meaning the same thing, and the apparatus referred to was one, it was said, "employed to cause the solution under pressure of other gases in other liquids." It was not the apparatus of the United States patent, though having some features the same.

But it is contended that even if considered as a 'method' patent, "it is merely for the method of operating the

apparatus, constituting the function of the apparatus, and, therefore, under the decision of this court, is for the same invention." And this is contended to be established by *Mosler Safe & Lock Co.* v. *Mosler*, 127 U. S. 354, and by a ruling of the Patent Office upon the application of Claude and Hess for an "Improvement in a Method of Storing Acetylene Gas for Distribution" and the acceptance of that ruling by the applicants.

The *Mosler Case*, it was said in *Miller* v. *Eagle Manfg. Co.*, 151 U. S. 186, 197, held "that a patent having issued for a product, as made by a certain process, a later patent could not be granted for the process which results in the product." The process was a purely mechanical process, and the ruling, it would seem, must be confined to the exact facts of the case, for in *Miller* v. *Eagle Manfg. Co.* it was said (p. 199) that "a single invention may include both the machine and the manufacture it creates, and in such cases, if the inventions are really separable, the inventor may be entitled to a monopoly of each." And *Sewall* v. *Jones*, 91 U. S. 171, 190, was cited for the purpose of showing that there might be a patent for the process and one for the product. *Merrill* v. *Yeomans*, 94 U. S. 568, was also cited (151 U. S., p. 199) as holding that "where a patent described an apparatus, a process, and a product, and the claims cover only the apparatus and the process, the law provided a remedy by a surrender of the patent and a reissue, for the purpose of embracing the product."

The ruling of the Commissioner of Patents referred to above is as follows:

"It was common long prior to the appellants' invention to force under pressure into a liquid solvent thereof in a closed vessel and was also common to draw off gas from a holder where it was contained under pressure, through an opening, the effective size of which was directly controlled by and proportionate to the pressure of the gas

within the holder, or, in other words, through a pressure regulator. The appellants were therefore not the inventors of the step of storing gas, as set forth, nor of the step of permitting gas to escape from a place of storage in the manner set forth. Neither of these steps modifies in any manner the old and expected effect of the other and the final result of the alleged process, namely, distributing gas at a uniform pressure, is the same as that produced by processes old in the art, as above stated. The appellants have therefore not invented a new and patentable process, although, as held in a companion case, they have devised an apparatus by which the old process of storing gas can be made practically and commercially useful. Claims to that apparatus have been allowed and it is believed that it is the only patentable invention disclosed by them.

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"It appears, further, that they do not cover proper methods, but merely the functions of mechanism and that they are not patentable in view of the decisions in *Cochrane* v. *Deener*, 94 U. S. 780, and *Boyden Brake Co.* v. *Westinghouse*, 83 O. G. 1067. Claim 3 clearly covers several independent disconnected steps which do not go to make up a patentable process."

The "companion case" referred to by the Commissioner is the patent in suit, and it will be observed that the Commissioner said it was for an apparatus by which the old process of storing gas could be made practically and commercially useful and that claims to it had been allowed. It was, therefore, distinctly a patent for an apparatus, while, on the contrary, all the foreign patents are explicitly for methods. The devices described in them were not a result of the operation of the methods. Some receptacle or apparatus was necessary to be shown to produce and hold the solution of the gas and the liquid employed as a solvent. Something else was necessary for

the use of the solution, and the device of the United States patent was aimed to secure it. It is distinct from the method. Whether it has patentable novelty is another question. And a serious question it is. The solubility of acetylene in liquids, especially in acetone, is availed of in all of the patents, United States and foreign. This cannot be denied—indeed, is admitted—and, as we have seen, there are devices described in the foreign patents for storing the solution and devices indicated for its use. The similarities and differences between the patents have given rise to a diversity of opinion and decision.

The Circuit Court of Appeals for the sixth circuit discerned a difference between the British patent and that in suit and considered that the former was for a process and the latter for an instrument to perform the process and, therefore, the two were not for the same invention and that necessarily the United States patent did not expire with the British patent. 192 Fed. Rep. 321.

The Circuit Court of Appeals for the seventh circuit expressed a contrary view and decided that the British patent and the patent in suit were for substantially the same invention, and the British patent having expired the patent in suit expired with it. The decisions had, respectively, the support of Judge Denison (188 Fed. Rep. 89) and Judge Kohlsaat (188 Fed. Rep. 85; 192 Fed. Rep. 321).

It was decided in the Circuit Court for the eastern district of Wisconsin, Judge Quarles sitting, that the device of the patent in suit was patentable and was not anticipated by anything in the prior art. 166 Fed. Rep. 907; see also 181 Fed. Rep. 387.

It was this conflict of views that induced this writ, but the conflict is not as to all questions in the case. If the decisions of the trial courts may be in opposition on invention and infringement as well as on the effect of the

foreign patents, such conflict cannot be asserted of the opinions of the Circuit Courts of Appeal. That of the eighth circuit—and to which this writ is directed—refrained from a decision on the merits and considered only the propriety of the discretion exercised by the trial court in granting a preliminary injunction; and, reviewing the expression of judicial opinion, decided that the court was justified in making the order. The Court of Appeals went no farther, as we have seen, and we are disposed to a like limitation. The questions are seriously disputable, as the difference in decision indicates, and we think we should follow the Circuit Court of Appeals and imitate the example of *Leeds & Catlin* v. *Victor Talking Machine Co.*, 213 U. S. 301, 311, 312. We have not the aid—and its value is inestimable—of the judgment of the trial court or of the Circuit Court of Appeals but must consider the question upon conflicting allegations and affidavits. The better course, therefore, is to reserve all questions except that of the identity of the patent in suit with the foreign patents and its termination by their expiration, and, with that reservation, we decide only that there was no abuse of discretion in granting and sustaining the order of injunction.

Affirmed.