

LACOMBE, Circuit Judge. At the time motion for preliminary injunction was made (94 Fed. 1004) defendant knew nothing about expiration of the French patent, and introduced no evidence on that point. Since then the case against the Apollo Company (Welsbach Light Co. v. Apollo Incandescent Gaslight Co., 94 Fed. 1005) came on to be heard, and the defense of expiration of such patent was fully presented. This court found that it raised objections to complainant's relief which should not be passed upon in preliminary motion, and therefore refused injunction pendente lite. Defendant now presents affidavits setting up the facts as to French patent as they were developed on the Apollo Case. Although this defense comes to light rather late, there is no good reason why this particular defendant should be enjoined while others are left free to infringe, and the motion to vacate preliminary injunction is granted, for the reason stated.

WELSBACH LIGHT CO. v. REX INCANDESCENT LIGHT CO.

(Circuit Court, S. D. New York. May 26, 1899.)

1. PATENTS—PRELIMINARY INJUNCTION—EFFECT OF PRIOR DECISIONS.

When a patent has been established by a decision of a circuit court after careful consideration upon a full record, another judge sitting subsequently in the same court in a different case, upon an application for preliminary injunction on ex parte papers, may well deem himself constrained to adopt the rulings in the prior case, even against his own judgment, when the facts are substantially the same.

2. SAME—EFFECT OF FOREIGN DECISION.

Where a patent has been sustained on final hearing by an American court, the fact that since such decision an English court, construing a British patent for the same invention, has reached a different conclusion, is no reason why the same American court, in a subsequent suit, and on a motion for preliminary injunction, should refuse to follow the earlier American decision, especially when the language of the two patents is not identical.

3. SAME.

The Rawson patent, No. 407,963, for improvements in incandescent mantles for lights, intended to make such mantles stronger, so that they can be handled and transported without breaking, was not anticipated by the French patent to Welsbach, No. 172,064, nor by the English patent to the same inventor, dated December 12, 1885. *Held*, therefore, on motion for preliminary injunction, that the Rawson patent was valid, and infringed.

This is an application for a preliminary injunction against defendant to restrain continued infringement of United States letters patent No. 407,963, for production of incandescent mantles, granted July 30, 1889 (upon application filed August 21, 1888), to F. W. & W. S. Rawson, and subsequently assigned to complainant. The patent states that the invention was patented in England September 1, 1886, in Germany July 24, 1887, and in France November 2, 1887.

John R. Bennett, for the motion.
Louis Hicks, opposed.

LACOMBE, Circuit Judge. The Welsbach incandescent mantle is a light hood or frame, which is suspended over the flame of a Bunsen burner so as to become heated by it to incandescence, causing it to

emit a large body of brilliant light. The hood itself is made of light network fabric,—such as muslin,—which, after being impregnated with solutions of salts of the earthy oxides of rarer metals (such as zirconium, lanthanum, etc.), is exposed to the heat of a flame. “The material of the fabric—generally cotton—is soon consumed, leaving a skeleton hood or frame, consisting of the incombustible or infusible products of the salts that were employed for impregnating the fabric, and this skeleton hood or frame will remain effective as an illuminant for hundreds of hours.” Although strong enough to resist the movements of the ignited gas and the distortions produced by ignition and extinguishment, the hood or mantle is in fact but an ash, extremely fragile, and liable to go to pieces if handled, or allowed to come into contact with any hard body. This peculiarity precludes transportation of the mantles from manufacturer to consumer after the cotton has been burned out, and the article put in the condition for use in which the consumer wishes to have it. To meet this condition, it used to be the practice (and, according to defendant’s affidavits, it is still the practice in Austria) to send the mantles impregnated with the solution of Welsbach, but not burned out at the factory, to the agents of the company, to be by them burned out at their shops, and then placed upon the gas burner in the house of the consumer. It was the object of the Rawsons’ invention to dispense with this method of distribution, and to put the mantles into such a condition that they could, after being burned out, be transported in convenient packages, like other merchandise. The specification sets forth:

That “the object of our improvement is to render these mantles, after ignition, sufficiently hard and resistant to allow of packing and handling without fear of breakage in the transport. * * * Difficulty has been found heretofore in the transport of these mantles without breakage, and various methods have been proposed. This difficulty our invention is designed to overcome by dipping the mantles, after they have been given their proper shape, into a liquid which will thoroughly penetrate the pores of the material, and will afterwards set to such a degree of hardness as to protect the material from danger of breakage in packing or handling, and which can afterward be removed without mechanical injury to the mantles, or without leaving any objectionable residue. * * * We have found that a very satisfactory method of carrying out our invention consists in dipping the cone into a hot solution of volatile hydrocarbon—such as benzine—mixed with paraffine wax or paraffine alone. By these means the mantle is covered with a thin coating of wax, which becomes sufficiently hard on cooling to allow of packing and handling without fear of breakage. The paraffine is capable of burning away without any residue except carbon, which will always be burned completely away by the flame of the Bunsen burner. * * * Other materials may be employed as long as they set hard at ordinary temperatures, and burn away without mechanical destruction to the mantle, and without leaving any residue, which would injure the light-giving properties of the mantle. The materials referred to as being capable of use in lieu of paraffine may be any solid hydrocarbon of a high boiling point, and many resins and gums soluble in spirit, such as alcohol, etc. Shellac will serve the same purpose, but not quite as advantageously.”

The claim is:

“(1) The herein-described improvement in strengthening incandescent mantles, consisting in coating the completed mantle with paraffine or other suitable material, substantially as set forth.”

The patent now in suit came before this court in the case of Welsbach Light Co. v. Sunlight Incandescent Gas Lamp Co., and at final

hearing upon pleadings and proofs, and after a three days' argument, was carefully considered by Judge Townsend. His opinion will be found in 87 Fed. 221. The matters discussed upon that hearing and disposed of in the opinion were anticipation, state of the art, construction of the patent, range of equivalents, and infringement. Reference may be had to the report, but it may be said briefly that the court found that there was no anticipation in the patents of Bright, Gwynn, Toppan, or Clamond; that the state of the art was such that the Rawson invention was a highly meritorious one; that the evidence indicated "not only the presence of inventive genius, but claimed for the invention the rank of a pioneer"; that because the invention was of such rank the patent should not be narrowly interpreted, but should be so construed as to cover a broad range of equivalents; that the process of the Sunlight Company, which consisted in dipping or immersing the burned out mantles in a solution composed chiefly of collodion, with the addition of a small percentage of castor oil, was an infringement, because, although such a collodion solution was not specifically mentioned in the patent, its mode of operation was well known, and it was fairly within the words of the specification, "Other materials may be employed as long as they set hard at ordinary temperatures, and burn away without mechanical destruction to the mantle." In this state of affairs the granting of a preliminary injunction against a defendant using substantially the same collodion mixture, and producing no new evidence of anticipation or as to the state of the art, would seem to be a foregone conclusion; and the writer so held when this application was first made in April, 1898. *Welsbach Light Co. v. Rex Incandescent Co.*, 94 Fed. 1004. Whatever may be the practice in other circuits, there has been here no departure from that laid down in *American Paper Pail & Box Co. v. National Folding Box & Paper Co.*, 2 C. C. A. 165, 51 Fed. 229, which indicates that when a patent has been established by a decision of a circuit court, after careful consideration upon a full record, another judge sitting subsequently in the same court upon application for preliminary injunction on ex parte papers might well deem himself constrained, contrary, even, to his own judgment, to adopt the rulings of his own court, since he does not sit as a court of review to reverse upon substantially the same record, the decision of a judge of coordinate jurisdiction. A re-examination of the rulings made upon the original hearing is to be sought not in the circuit court, but in the circuit court of appeals. It is not the practice, upon subsequent motions of this character, to go over the entire record before the judge who heard the original cause at final hearing. His statements of fact are assumed to be accurate, and his rulings of law sound. In the case at bar, however, there has been a most persistent reiteration of the proposition that there was to be presented new evidence as to the state of the art, which would be of such a character as to throw a new light upon the record presented to Judge Townsend, and to show that he was entirely misled as to the bearing of the evidence which he considered. With considerable doubt as to the accuracy of this suggestion, this court has again carefully examined the entire record in the Sunlight Case (including the briefs of counsel therein),

and has given close attention to the opinion of Justice Wills in *Sunlight, etc., Co. v. Incandescent, etc., Co.*, 14 Pat. Des. & Trade-Mark Cas. 757, upon which so much stress has been laid. The result has been an entire concurrence in all of Judge Townsend's conclusions. It is difficult to see how, upon the record before him, he could have decided otherwise. Indeed, it is quite apparent that Mr. Justice Wills also regarded the Rawsons' invention as a highly meritorious one, involving "so much of invention and independent thought and consideration that it may very well stand, notwithstanding the anticipation of the idea in the rough," and thought that the alleged anticipations relied on were, as he expresses it, "miles off." It is true that he held a collodion solution not to be an infringement of the English patent which was before him, partly, perhaps, because the English courts are not quite so liberal as our own in applying the doctrine of equivalency in favor of a pioneer patent; but principally because of the phraseology of the specification, which is not identical with that of the American patent. He found that the patentee had a right to claim a large number of substances; that there are substances which "set" by cooling and which "set" by evaporation, both of which they could have included; but that, inasmuch as they used the phrase, "set hard at ordinary temperatures," and did not anywhere in the patent refer to a single substance which would "set" otherwise than by reduction of temperature, they must be confined to a hot-process coating. In the United States patent, however, the patentees mention shellac, which may be used hot, but is usually used cold. It is thought that, in view of the different phraseology of the two patents, there is no conflict between Judge Townsend and Justice Wills; but, if there were, the proposition that this court should follow the English decision as to the range of equivalents rather than that of Judge Townsend, is preposterous.

The next question is, what new evidence, not presented at final hearing, is now before the court? Besides an English patent to Paget, the application for which is subsequent in date to the Rawsons' application for their English patent, two patents to Welsbach have been introduced. The first is a French patent, No. 172,064, deposited November 4, 1885, to which a certificate of addition was deposited April 22, 1886, and published during the third three months of 1886. The part of said certificate of addition relied on reads as follows:

"To protect the tissue, and in particular to prevent it from being injured by the jet of gas, one can introduce into it some stronger threads, as is shown in figure 7. Likewise, in order to strengthen the parts of the finished mantle which are exposed to the first contact with the flame when it is in use, they are covered, by means of a small brush, with a certain quantity of the same solution in a rather concentrated state, or, rather, one plunges them into the solution which, when one heats them anew to incandescence, is also converted to earthy substance. In order to make the finished mantle adhere very firmly to the platinum wire forming a support, the parts in contact with the metallic wire are treated in the same manner. For this purpose one can employ the same solution of salt, or, in preference, a solution of about equal parts of nitrate of magnesium and nitrate of aluminium, to which one can add phosphoric acid. One can also, for this purpose, employ nitrate of beryllium. The mantles can be plunged into the said solutions either before or after the combustion of the fibrous structure."

The second new patent is the English patent to Welsbach, No. 15,266, December 12, 1885, published April 24, 1886. It contains these clauses:

"In order to protect the fabric, and prevent its rupture when it is exposed to a strong current of gas, stronger threads can be added to the fabric before it is converted into ashes. Also the fabric can be painted with, or dipped into, a concentrated solution of the salts, so as to provide a fresh layer of the metallic salts, which become fully oxidized soon after the fabric has become incandescent. In order to strengthen the connection of the cone of earths to the platinum wire, those parts of the fabric which are next the wire are more fully impregnated with the solution, or with a solution of about equal parts of nitrates of magnesium and aluminium."

Exactly what this process of Welsbach's was may be made clearer by quotation from the patents which were before Judge Townsend. The German patent to Welsbach, issued April 15, 1887 (No. 39,612), says: "To protect the tissue, mainly to prevent a bursting of the same by the emanating gases of the flame, stronger threads may be inserted before incineration. For the same purpose, to strengthen the parts of the finished mantle exposed to the first attack of the gases, said parts are covered with a rather concentrated solution of the salts mentioned by means of a little brush, or covered with a new coating by immersing them. Thereafter, through an incandescence of the whole tissue for a second of time, the earths are again set free. To attach the finished earth mantle very firmly to the supporting platinum wire, so that the mantle can withstand any vibration, the parts of the mantle in contact with the platinum wire are treated in the same manner. For this purpose the same solution is used, or, preferably, a solution of about equal parts of nitrates of magnesium and aluminium with an addition of phosphoric acid. Nitrate of beryllium can be used in the same way for the fixation. The mantles may be covered with the above solutions either before or after the incineration. In producing the 'Zirconia mantles,' the mantle is gradually lifted when its upper part is fully incandescent."

In the other German patent, issued to him December 17, 1887 (No. 41,945), Welsbach, by an amendment suggested October 20, 1886, added the following:

"As an incinerated mantle is very delicate, and quite readily destroyed, although knit mantles can even be touched by hand and deformed by gentle pressure, without being destroyed, but will return to their original shape after the pressure is removed, yet such an incandescent mantle cannot stand any longer transportation, especially when exposed to uneven and violent shocks. If, however, such an incinerated mantle is coated with a substance which is not brittle, and can be burned with perfect ease, and which will permit of the single particles being displaced only within their limit of elasticity, the incandescent body, even in its incinerated condition, will stand without danger any transportation. To produce this coating, the ready incinerated mantle is dipped for a moment into a very dilute solution of caoutchouc, or into collodion, or some like substance, and is then slowly dried. At the first moment of the subsequent incandescence of the mantle, this coating is completely destroyed by the flame, and the mantle is left behind in its original shape."

For this no claim is made in No. 41,945. These two patents last quoted from, it will be noted, are subsequent to Rawsons' invention as disclosed in the English patent of September 1, 1886.

It is quite apparent that the process set forth in the two new patents is not the same as that described in those last quoted from, which were before Judge Townsend; and it seems entirely clear that it involves a different invention from that covered by the patent in suit. What Welsbach disclosed in those earlier patents was a subsidiary treatment, which lay closely within the lines of his original invention.

By substantially repeating his original process, he reinforced his mantle so that it might the better withstand the strains to which it might be subjected while in use. He had no intention thereby to protect such mantle, and there is not a scintilla of evidence to show that he did by such process in fact protect his mantle, against the rough handling of transportation. Subsequent to the dates of these early patents, he refers to his mantle as too fragile to withstand contact with hard substances. That he himself regarded the two processes as involving different inventions is apparent from the history of the abandoned application for United States patent, which he made with Haitinger, March 31, 1888. In this both processes are described separately, and separately claimed. The process of strengthening by dipping in a very dilute solution of caoutchouc, collodion, and the like, etc., was rejected upon the Rawsons' English patent. Thereupon the application was abandoned, and Welsbach subsequently applied for and obtained United States patent for his process of re-enforcement by re-immersion in his original solution. The new patents therefore do not impair in any way the soundness of Judge Townsend's conclusion as to the novelty and meritoriousness of the patent. The suggestion of lack of utility is wholly without weight. If the "soft mantles"—that is, mantles from which the cotton has not been burned out—are quite as convenient for distribution and use as those which have been treated according to the process of the patent, defendant may freely use them. But the exhibition on the argument inclines the court to the opinion that the consumer is likely to prefer the improved article.

Defendant has introduced four affidavits to show prior use at the laboratory of one Charles M. Lungren. Lungren himself, however, in an answering affidavit, fixes the date (by reference to the formation of the Lungren Incandescent Gas Light Company) too late to affect the validity of the patent. Accepting the conclusion in the Sunlight Case that the patentees are entitled to a liberal application of the doctrine of equivalents, it is unnecessary to discuss the question of infringement. The solution of the defendant in this case is substantially the same as in the Sunlight Case (collodion and castor oil), with a slight admixture of water. Preliminary injunction may issue.

HAWGOOD & AVERY TRANSIT CO. v. DINGMAN et al.

BARRY TOWING & WRECKING CO. et al. v. INTER-OCEAN COAL & COKE CO. et al.

(Circuit Court of Appeals, Eighth Circuit. May 9, 1899.)

Nos. 1,149, -150.

1. MARITIME LIEN—SUIT TO ENFORCE—EFFECT OF RELEASE ON BOND.

A release to a claimant under an appraisal and stipulation or bond, not made under the limited liability act, of a part of the res seized under a libel in admiralty has the same effect upon the liens upon the part released that a discharge of the entire res under a like appraisal and stipulation or bond would have had upon the liens upon the whole thing, which