

THOMSON-HOUSTON ELECTRIC CO. v. WESTERN ELECTRIC CO. et al.
(Circuit Court of Appeals, Seventh Circuit. March 5, 1896.)

No. 232.

1. PATENTS—TWO PATENTS FOR SAME INVENTION.

In view of the fact that Rev. St. § 4888, requires the application to contain a written description of the invention, "in such full, clear, concise, and exact terms as to enable any person skilled in the art * * * to make and use the same," it follows that, in determining whether the invention described in one patent differs from that described in another, the investigation is not limited to a mere reading of the specifications and claims, but evidence may be heard—and, in a difficult case, ought to be heard—concerning the construction and actual operation of the machines, respectively.

2. SAME—DYNAMO-ELECTRIC MACHINES.

The Thomson-Houston patent, No. 238,315, for an improvement in the regulation of currents developed by dynamo-electric machines, and consisting of devices whereby the brushes on the commutator are automatically shifted so as to control variations of the current resulting from variations in the number of lamps depending thereon, is void because of anticipation by patent No. 223,659, to the same parties, for a device for the automatic adjustment of the brushes to prevent sparking and other irregularities. 16 C. C. A. 642, 70 Fed. 69, reaffirmed.

Appeal from the Circuit Court of the United States for the Northern District of Illinois.

This was a suit in equity by the Thomson-Houston Electric Company against the Western Electric Company and Enos M. Barton for alleged infringement of letters patent No. 238,315, issued March 1, 1881, to Elihu Thomson and Edwin J. Houston, for a current regulator for dynamo-electric machines. This court heretofore (16 C. C. A. 642, 70 Fed. 69) affirmed a decree of the circuit court (65 Fed. 615) declaring the patent void because of anticipation by letters patent No. 223,659, granted to the same parties January 20, 1880. A petition for a rehearing is now denied.

Frederick P. Fish, Robert S. Taylor, Charles R. Offield, Henry S. Towle, Charles C. Linthicum, and Geo. R. Blodgett, for appellant.

George P. Barton and Charles A. Brown, for appellees.

Before WOODS, JENKINS, and SHOWALTER, Circuit Judges.

WOODS, Circuit Judge. The objections made to the opinion of the court in this case will be considered briefly, though some of them can be of but little importance, because directed to matters which were expressly waived when the ten propositions of counsel for appellant were assumed to be true. The essential question is whether, on that assumption, a consistent and proper conclusion was reached. The statement in the opinion that the second patent does not specify "in just what feature of the construction or of the mode of use the novelty and utility entitled to be called invention were supposed by the patentees to be found," has been misapprehended. No reference to the requirements of section 4888 of the Revised Statutes was intended. In the first paragraph of the statement of the case by the court it had been said that the controversy turns mainly upon a comparison of the patent in suit with the

earlier letters, No. 223,659; and in order to make that comparison the court was seeking an exact and undisputed statement of the "improved construction and mode of use of the apparatus employed in patent No. 223,659," in which the patentees supposed their second invention to consist, and, not finding what was desired in the specification of the patent, quoted from the brief of counsel the statements which they had found it convenient, if not necessary, to make in aid of their discussion of the question, which the court, as best it could, was endeavoring first to state, and then to solve. There had been no suggestion that the claims of the second patent did not meet the requirements of the statute, and it was not in the thought of the court to question their validity on that ground.

It is now contended that in comparing the two patents only the face of the letters, and not the evidence concerning the construction and operation of devices made in alleged exemplification of the patented devices, should be considered. Accordingly, the suggestion in our opinion concerning the first patent, that "it does not seem to follow, necessarily, that no current was intended to pass through the controller magnet, A, except current resulting from the difference of potential between successive segments at the moment when the forward one passes from under the main brush," is denied; and quotations are made of parts of the specification, and of the first, fifth, and seventh claims of the patent, to show that "in every part of the patent, from beginning to end," "the patentees have affirmed, over and over, by argument and by inference, that the current which flows in the accessory circuit is that due to the difference of potential between the successive segments as they pass from under the main brush," and so it is assumed to be unquestionable "that patent No. 223,659 describes on its face an apparatus in which an accessory collector takes up the current due to difference between the potential of the leaving segment and the one under the main brush, but no other," and that "the two patents describe devices which differ palpably in their mechanism, and in the principles and modes of operation attributed to them in the patents." The clause, "attributed to them in the patents," is italicized in the briefs, and, as stated, means that it must be determined whether the two patents cover different devices and inventions by a mere reading of the specifications and claims, unaided by the proofs, however satisfactory, of the actual operation of devices constructed in illustration of either patent; or, as it is elsewhere expressed, the intention is "to hold the discussion where it belongs,—to the patents as they read." To this mode of discussion section 4888 is pertinent. It requires that an application for a patent (not the claim) shall contain a written description of the supposed invention, and of the manner of constructing and using it, "in such full, clear, concise and exact terms as to enable any person skilled in the art * * * to make and use the same"; and it follows that, in determining whether the invention described in one patent differs from that

described in another, evidence may be heard—and, in a difficult case, manifestly ought to be heard—concerning the construction and actual operation of each. Specifications and claims are necessary, but inventions consist in things, not in words. To quote from the petition upon another point, “In the construction of a patent, it is not the personal intent or understanding of the patentee, but the actual facts regarding the invention, that are material.” This is equally true when two patents are being construed and compared for the purpose of determining whether the devices are essentially different. It may be conceded to have been the clear intention of the patentees, by their first letters, to cover an apparatus in which an accessory collector takes up the current due solely to difference of potential between the leaving segment and the one under the main brush. They may have understood that to be the chief, and possibly the only valid, feature of invention. But it is at the same time evident that the claims are not all so limited, and, unless there is something in the prior art of which proof has not been made, the patent ought not to be so restricted. It is conceded that “in the second, third, and fourth claims the accessory collector and controller magnet are included as parts of the combination, without any express limitation as to the origin of the current which flows through them.” Indeed, it is clear, as shown by questions 39 and 40 and the answers thereto, set out in the statement of the case [16 C. C. A. 642, 70 Fed. 83], that there may “always be found flowing in the accessory circuit some current other than that due wholly to the difference of potential between the adjacent segments”; and though it is plain that, if that current should not be sufficient to overcome the retractile spring which opposes the magnet of the combination, the effective operation of the apparatus would depend upon the varying current produced by the varying difference of potential between adjacent segments, it is also clear, as stated in our opinion, after quoting from the specification, that “it does not seem to follow necessarily that no current was intended to pass through the controller magnet, A, except current resulting from the difference of potential between successive segments.” None of the claims are, in specific terms, so limited, and some of them cannot fairly be so construed. Certainly a charge of infringement of that patent could not have been escaped by showing that a device made in all other respects in conformity with the specification was so proportioned that there might always be found flowing in the accessory circuit some current other than that due to the difference of potential between adjacent segments,—a fact which it is shown could be determined only by the employment of suitable tests upon each apparatus. It may be added, as a deduction from what has been said, that if the current in the accessory circuit, which results from the difference of potential of the brushes when touching a single segment, is barely insufficient to overcome the spring opposed to the magnet, A, a change in the external circuit, causing an increase in the main current, would cause a corresponding in-

crease of the supposed current in the accessory circuit sufficient to overcome the spring, independently of "the electrical condition of the segments of the commutator at the moment of leaving the collectors;" and, this being so, the apparatus, in a measure at least, or theoretically, is responsive to changes in the main current, as well as to the varying differences of potential between segments, and, when actually so, is to be regarded, according to the contention of appellant, as an exemplification of the second, rather than of the first, patent. But could it be insisted that an apparatus of that character, if made during the life of the first patent, either before or after the issue of the second, would not have been an infringement of the first? We think not. On the contrary, the statement may be repeated, with added emphasis, "that in respect to the question of invention the omission of the accessory brush is of no significance," since its presence or absence does not affect essentially the mode of operation, nor determine whether a particular apparatus exemplifies one patent or the other.

But it is said that "such a doctrine would destroy all the electrical patents in existence," and, to illustrate the assertion, reference is made to the telephone of Reis, which was capable of transmitting music, and to those of Bell and Blake, which were the first to transmit articulate speech. The devices of the different patents, doubtless, are much alike in appearance and construction, and in the mode or principle of operation; but it is enough to observe here that they produce distinctly different results, which are perceived and understood without the employment of any tests other than the practical use of the devices in the manner and for the purposes for which they were respectively designed and patented,—a test which is certainly not unfair or illogical. It may be conceded, as asserted, that the differences of operation could be brought about by mechanical changes so minute that the most expert telephonist in the world, taking an instrument at random out of the line, could not tell, by mere inspection of it, whether it would be a Reis or a Blake in operation and result; but a mere hearing would be enough. So, too, in respect to the Edison incandescent lamp, and the old form of lamp known as the "Konn Lamp," whatever the possibilities of converting one into the other by gradual and hardly perceptible changes, it is evident, on the statements and explanation of counsel, that the difference between the lamps, both in construction and in operation, is clear enough to distinguish one from the other. By way of further illustration, it is said that "there is a cabinet in the Agassiz Museum, at Cambridge, containing a row of mounted skeletons, beginning at one end with a monkey, and ending at the other with a Caucasian. The difference between the extremes is wide enough, but the two half-way chaps look like brothers." But they are not brothers. By neither man nor monkey has a live one of either kind ever been mistaken for the other, and in skeleton, with all

the zeal of the Darwinians to find the missing link, they remain, to the experts, easily distinguishable, and can only be said to resemble. In the light of present knowledge, the Caucasian, as an invention, is not anticipated by the Simian.

It was understood to be admitted at the hearing, and, if not admitted, was sufficiently proved, as stated in the opinion, "that upon all dynamos which existed when the patents were issued the two devices were interchangeable, so that, when the brushes were so moved as to prevent spark, they established and maintained constant current." But it is not material to the argument whether the statement is strictly accurate or not. It remains true that, upon dynamos of uniform field, each device prevents spark, and maintains constant current, while upon dynamos of irregular field neither device can be successfully employed unless provision is made for a variable spread of the commutator brushes. With that provision it is agreed that the device of the second patent is effective for both purposes, and, though questioned by counsel (hesitatingly), we are convinced that the same is true of the device of the first patent.

The statement that "if, instead of being in the accessory current, the [controller] magnet be transferred to the main current, or a shunted portion thereof, exactly the same kinds of operation, effected in the same way and by like adjustments, must go on," is criticised and disputed, but not upon grounds which are new and unconsidered, or which seem to us to affect the essential truth of the proposition. Identity of operation and of adjustments, it is to be observed, is not alleged, and of the differences insisted upon our views are sufficiently developed in the original opinion.

It is said that the course of the case and the opinion of the court have developed an importance, not apprehended in the beginning, to the question whether it was known, "prior to the discovery of the fact by Thomson and Houston, that the current of a dynamo could be maintained at a constant value, under variations of load, by movement of the brushes"; and, assuming that the court was misled in that respect, counsel have restated, and elaborated at great length, their discussion of the difference between shifting the brushes to change the current, and shifting them to maintain constancy of current, in the outer circuit. The question is confessedly a collateral one only, and, without attempting to restate or summarize what has been said about it, we are content to say simply that when the opinion in the case was written the court had the same understanding as now of the respective views of counsel in regard to it.

The objections made to the last sentence of our opinion are answered already. If the current regulator was not covered and protected by the first patent, it is because the claims are too narrow to cover the entire invention shown; but, on the proofs in the record, we think it clear that some of the claims are entitled to a construction broad enough to cover the supposed in-

vention of the second patent. It would certainly be unreasonable to say that infringement of the first patent could have been avoided by proportioning the parts of the device, whether done intentionally or accidentally, so as to admit of the passage of an effective part of the main current through the accessory circuit; and yet, as counsel for the appellant have been constrained to contend, when so adjusted the device is covered by the second patent. In other words, at least one form of construction of the first device exemplifies the second. It is therefore beyond dispute, as originally stated, that to uphold the second patent would be "an unwarrantable prolongation of the just monopoly conferred by the first patent." The petition is denied.

After the original opinion was pronounced, there was inserted in it by mistake the following words, which are to be disregarded, namely: "The current through the accessory brush, it seems to be agreed (C. Q. 97, and answer, supra), 'passes through a variation from a maximum to a minimum between the time of its first contact with each segment and its separation from that segment.'" And see 16 C. C. A. 642, 670, at bottom of page, and 70 Fed. 69, 98, at top of page.

THE POTOMAC.

NIAGARA FALLS PAPER CO. v. CROCKETT et al.

(Circuit Court of Appeals, Second Circuit. February 18, 1896.)

SEAMEN—EXTRA WAGES.

Seamen are not entitled to extra wages for services rendered in unloading cargo in a harbor of refuge, in order to free the vessel from water; and a promise by the master to pay extra compensation upon their refusal to work without it, is void. 66 Fed. 348, reversed.

Appeal from the District Court of the United States for the Northern District of New York.

This was a libel by James Crouckett and James Hanley against the barge Potomac (Niagara Falls Paper Company, claimant), to recover extra wages. The district court made a decree in favor of libelants (66 Fed. 348), and the claimant appealed.

George Clinton, for appellant.

Urban C. Bell, for appellees.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. The libelants shipped, in September, 1894, on board the barge Potomac, one as mate and the other as seaman, and each upon wages by the month. The barge left Buffalo in September, bound for Parry Sound, in Canada. On her return trip, she was laden with lumber below and on deck, consigned to Tonawanda, N. Y., and left Parry Sound on the morning