

U.S. Supreme Court

Westinghouse Elec. Co. v. Wagner Elec. Co., 225 U.S. 604 (1912)

Westinghouse Electric and Manufacturing Company

v. Wagner Electric and Manufacturing Company

No. 179

Argued March 1, 1912

Decided June 7, 1912

225 U.S. 604

CERTIORARI TO THE CIRCUIT COURT OF APPEALS

FOR THE EIGHTH CIRCUIT

Syllabus

Where the infringer has sold or used a patented article, the patentee is entitled to recover all of the profits.

Where a patent, though using old elements, gives the entire value to the combination, the patentee is entitled to recover from an infringer all the profits.

Where profits are made by using an article patented as an entirety, the infringer is liable for all the profits unless he can show, and the

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burden is on him, that the profits are partly the result of some other things used by him. *Elizabeth v. Pavement Co.*, [97 U. S. 126](#).

Where the patent admittedly creates only a part of the profits, the patentee is only entitled to that part, and he must apportion the infringer's profits and show by reliable and satisfactory evidence either what part of the profits are attributable to his patent or that the entire value of the infringing article is attributable to his patent. *Garretson v. Clark*, [111 U. S. 120](#).

Congress has legislated, Rev.Stat., § 4921, with a view to affording the patentee ample redress against the infringer, but the general rule of law that the burden is on the one suing for profits to show that they had been made applies.

The patent itself is evidence of the utility of the claim, and an infringer is estopped from denying that it is of value.

Where the plaintiff patentee shows that profits have been made by the use of his patent, but defendant proves that there were other elements contributing to the profits, it then devolves upon the plaintiff to apportion the amount of profits attributable to the use of his patent.

Where the infringer, however, by commingling the elements, renders it impossible for the patentee to meet the requirement of apportionment, the entire inseparable profit must be given to the patentee. In such a case, as in that of a trustee *ex maleficio* confusing gains, the loss should fall on the guilty, and not on the innocent.

This rule applies even if the patented device infringed did not preponderate the creation of profits. The owner of a small part of a fund is equally entitled to protection as the owner of a larger share.

While the rule applied may ultimately shift the burden so as to cast it on the defendant, it is justly cast upon one who should bear it, as he wrought the confusion.

Where, on reversal, a decree for appellant would deprive appellee of the right to ruling on exceptions taken by him to the master's report which were not passed on by the court, and it appears that other questions of law were not passed on below, and also that material evidence was omitted, the case will be remanded with power to hear and determine on new testimony and for further proceedings not inconsistent with the opinion.

173 F. 361 reversed.

The current produced by an electric generator is of relatively low pressure, and for that reason it is impracticable to utilize it, for power purposes, more than five or

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six miles from the central station. It was found, however, that this pressure, or voltage, could be increased by the use of a transformer or converter, consisting of a metal core, through and around which are wound primary insulated wires leading from the generator. Secondary wires, also insulated, are wound through and around the same core, and carried thence to the point of application. The voltage is increased or decreased according as the secondary wires are wrapped around the core more or less frequently than the primary wires.

One of the consequences of thus transforming the current is the generation of heat. In small machines, this is corrected by radiation, but in large ones, the heat "ages" the iron, lessens the efficiency of the transformer, and, in time, deteriorates the insulation around the wires. This latter result causes short circuits, makes it impracticable to take

advantage of the increased voltage, and thus again restricts the area in which currents of more than 10 K.W. can be used for producing light and power. 112 F. 418.

Many efforts were made to overcome this difficulty, but without success until July 12, 1887, when George Westinghouse, Jr., secured patent 366,362 for an "Electrical Converter" which, his application stated, was intended to prevent the converter's becoming "overheated when employed for a long time in transforming currents of high electromotive force." Extracts from the specification and claims are copied in the margin. *

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Referring specially to the specifications and Claim 4, which is here involved, and speaking generally, rather than technically, it will be seen that the transformer consisted of a core, composed of groups of thin metal plates, so plugged apart as to leave (a) open spaces in the core. The primary and secondary wires were wound through rectangular openings near the ends of these plates. The entire apparatus was then placed in a case filled with nonconducting oil, which, when heated, circulated in and around the transformer, being cooled by contact with the exterior surface of the enclosing box or receptacle. This invention proved to be of immense value, and made it possible (112 F. 418, 117 F. 498) to transmit and apply powerful currents so as to produce power and light at a great distance from the generating plant. The patent was utilized by the Union Carbide Company, and on May 10, 1900, the Westinghouse Electric & Manufacturing Company, as assignee of George Westinghouse, sued that company for infringing Claim 4. The transformers which the Carbide Company was using had been sold by the Wagner Company. As vendor and

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warrantor, the latter therefore defended, and admits that the decree (112 F. 417) of November 11, 1901, sustaining the validity of Claim 4, is, as to it, *res judicata*. That decree was affirmed May 29, 1902 (117 F. 495), and on June 24, 1902, the Westinghouse Company brought this suit (129 F. 604) against the Wagner Company, praying for damages and profits, and also for an injunction against further infringement.

It appeared that, after the decree in the *Carbide* case, the Wagner Company had instructed its experts to build a transformer that would not infringe the Westinghouse patent. They thereupon devised one, referred to herein as Type M, which omitted the (a) open spaces in the core, but substituted (b) spaces between the coil, and (c) spaces between the coil and the core.

The court held that these Type M transformers, eliminating spaces in the core, were not an infringement of Claim 4, and thereupon refused the injunction. 129 F. 604. But the defendant, in its answer, admitted that it had infringed Claim 4 by the manufacture of transformers which, as it subsequently developed, contained openings (a) in the core, and also (b) openings between the coils, and (c) between the coil and core. The case

was therefore referred to a master to state an account of damages and profits arising from the infringement of Claim 4 prior to June 24, 1902.

On the hearing, it appeared that the Wagner Company manufactured various electrical appliances that had been made in the same shop, by the same workmen, and under the same general superintendence as that employed in making the transformers. No account had been kept which would show the cost of labor and shop expenses attributable to these transformers. Nor was there anything on the books indicating what, if any, profit had been realized from their sales.

The gross receipts of \$2,314,744.75 were mingled. The

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books only showed a gross profit of about eight percent, but it appeared that the plant had grown and the business had extended during the period covered by the accounting. There was testimony that the company had the general policy of fixing prices at a figure which would net twenty-five percent. The master made an elaborate analysis of the data as to flat cost of labor and material, shop expenses, and commissions applicable to the transformers. From this data and the policy of the company, he ultimately reached the conclusion that the company had made a profit of \$132,433 on the \$955,271.76 which the books showed had been received from the sale of several thousand infringing transformers. But, at the close of the plaintiff's testimony, the defendant demurred to the evidence on the ground that it failed to show that any profit had been made in the sale of the infringing transformers. The demurrer was overruled. The defendant then claimed that the infringing transformers contained elements of the patent which were not embraced in Claim 4, for which alone this suit was proceeding, and that no profit due to those elements could be recovered in this case unless the plaintiff apportioned the gains due solely to Claim 4. It also offered evidence, including a heat test, tending to support its contention that a transformer containing only the elements covered by Claim 4 was of little utility; that it operated mainly to reduce the heat in the core, when it was much more important to keep the coils cool; that the infringing transformers contained spaces (b) between the coils and (c) between coil and core which, it contended, were additions and noninfringing improvements, contributing to the profits, if any had been made.

In reply and to disprove the defendant's contention, the plaintiff relied, among other things, on the fact that, upon the hearing of the application to enjoin the defendant from manufacturing transformers containing only (b)

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spaces between the coil and (c) between coil and core, the Wagner Company had contended that these grooves or channels had been used to avoid infringement, although they "crippled the coils" and actually "lessened the electrical efficiency of the transformers."

At the conclusion of the lengthy testimony, the substance of which is barely outlined above, the master found from the evidence and under the decision in 117 F. 498, binding on defendant, that Claim 4 was an entirety, covering not only open spaces in the core, but the use of the oil in a closed receptacle for cooling the transformer; that all the commercial value of those sold by the defendant was due to the use of Claim 4 of plaintiff's patent, and not to additions made by the defendant. He recommended that a decree should be entered against the defendant for \$132,433.35,

"being approximately 25 percent on the net amount of the sales of infringing transformers after deducting commissions and fixing the factory cost at 40 percent."

The defendant filed many exceptions, among others:

"That the complainant has not shown what was the profit made by defendant on its transformers, due to the patented invention of Claim 4, as distinguished and segregated from the other features contained in said transformers."

There were also numerous exceptions as to the master's method of stating the account. These and others were not specifically passed on, because the circuit court and the circuit court of appeals (one judge dissenting) held (173 F. 361) that Claim 4 was a limited, detailed claim; that the additions made by the defendant were noninfringing and valuable improvements which contributed to the profits; that the burden of apportionment was upon plaintiff, and, having failed to separate profits, it was only entitled to a decree for nominal damages. The court (one judge dissenting) also affirmed

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the decree that Type M was not an infringement of Claim 4.

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MR. JUSTICE LAMAR, after making the foregoing statement of the case, delivered the opinion of the Court.

The statute makes the decision of the circuit court of appeals final in patent cases, and the plaintiff's petition for the writ of certiorari herein was not granted for the

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purpose of reexamining the court's ruling that defendant's Type M transformer was not an infringement of Claim 4 of the Westinghouse patent. The writ was issued in view of the holding that, though the master found that the defendant had made a profit of \$132,000 from the sale of infringing transformers, the plaintiff could yet only recover \$1, because it failed to separate the profits made by its patent from those made by the defendant's addition.

1. The question as to who has the burden of proof in cases like this is one of great practical importance, and constantly arises in patent cases. There has been much controversy on the subject, and a conflict in the decisions. The authorities cited in the briefs of the two litigants, and others bearing on the subject, have been examined, but we shall not undertake to separately review them, for they disagree not so much as to the rule as to its application. It will be sufficient for the present purposes to say that:

(a) Where the infringer has sold or used a patented article, the plaintiff is entitled to recover all of the profits.

(b) Where a patent, though using old elements, gives the entire value to the combination, the plaintiff is entitled to recover all the profits. *Hurlbut v. Schillinger*, 130 U. S. 472.

(c) Where profits are made by the use of an article patented as an entirety, the infringer is liable for all the profits "unless he can show -- and the burden is on him to show -- that a portion of them is the result of some other thing used by him." *Elizabeth v. Pavement Co.*, 97 U. S. 127.

(d) But there are many cases in which the plaintiff's patent is only a part of the machine and creates only a part of the profits. His invention may have been used in combination with valuable improvements made, or other patents appropriated by the infringer, and each may have

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jointly, but unequally, contributed to the profits. In such case, if plaintiff's patent only created a part of the profits, he is only entitled to recover that part of the net gains. He must therefore

"give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature."

Garretson v. Clark 111 U. S. 121.

The real controversy arises in applying this principle to those cases where it is impossible to separate the single profit into its component parts.

2. In considering the question presented by the record here, it is to be borne in mind that Congress has legislated (Rev.Stat. § 4921) with a view of affording the patentee ample redress against the infringer. It not only makes the latter liable for damages --

sometimes three-fold damages -- but for all profits derived from the use or sale of plaintiff's invention. The rule as to the burden of proof has, however, been so applied that this statutory right has been often nullified by those infringers who had ingenuity enough to smother the patent with improvements belonging to themselves or to third persons. In such cases, the greater the wrong, the greater the immunity; the greater the number of improvements, the greater the difficulty of separating the profits. And if that difficulty could only be converted into an impossibility, the defendant retained all of the gains because the injured patentee could not separate what the guilty infringer had made impossible of separation.

Manifestly such consequences demonstrate that either

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the rule or its application is wrong. The rule is sound, for it but announces the general proposition that the plaintiff must prove its case and carry the burden imposed by law upon every person seeking to recover money or property from another. But the principle must not be pressed so far as to override others equally important in the administration of justice. It may serve to illustrate the rule and its limitations if, at the risk of stating the obvious, we apply it to the various steps of this case.

The plaintiff proved its patent, and that it had been infringed by the defendant in the manufacture of several thousand transformers, which sold for \$955,000. The patent was itself evidence of the utility of Claim 4, and the defendant was estopped from denying that it was of value. *Lehnbeuter v. Holthaus*, [105 U. S. 94](#). But no matter how great its presumptive or actual value, it did not follow that the defendant had made a profit by the sale of the infringing transformers. And so, having sued for profits, the Westinghouse Company was under the burden of showing they had been made. This it did to the satisfaction of the master, who found that the defendant had netted \$132,000 from their sale.

The defendant then had the right either to disprove the plaintiff's case or to offer evidence in mitigation, or both. Accordingly, it submitted evidence tending to show that the spaces added by the defendants were noninfringing and valuable improvements which had contributed to the making of the profits. In reply, the Westinghouse Company insisted that Claim 4 was an entirety, covering a circulatory system in and around a transformer placed in an oil-filled receptacle; that it embraced the "intervening spaces in the coil" because at least a part of the coil was in the core; that, if these spaces were held not to be infringements, they had in fact, as employed by the defendant, added nothing to the profits, but, on the contrary, had crippled the coil and lessened the electrical

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efficiency of the transformer. 129 F. 607. For that reason, the plaintiff contended that it had shown that all the gains were "legally attributable to the patented

feature." *Garretson v. Clark*, 111 U. S. 121; *Elizabeth v. Pavement Co.*, 97 U. S. 127 (6); *Crosby Steam Gage & Valve Co. v. Consolidated Safety Valve Co.* 141 U. S. 454; *Keystone Mfg. Co. v. Adams*, 151 U. S. 144, 151 U. S. 145. This view was sustained by the master. But if it be assumed, as was found to be the fact by the court, that the spaces were noninfringing and valuable improvements, it may then have *prima facie* appeared that these changes had contributed to the profits. If so, the burden of apportionment was then logically on the plaintiff, since it was only entitled to recover such part of the commingled profits as was attributable to the use of its invention.

3. Lindley, L.J. said in *Siddell v. Vickers*, 9 Rep.Pat.Cas. 162, that there "was no form of account more difficult to work out than an account of profits." But that is no reason why the plaintiff should be denied its rights. The problem here, though different, was in many respects analogous to that presented in those cases in which it is necessary to separate the interstate from the intrastate earnings made by a railroad where the same track, rolling stock, depots, and labor are employed at the same time in making gross receipts. These commingled expenses must be apportioned between the two classes of earnings in order to determine whether the intrastate rate is confiscatory. The courts, "while recognizing the impossibility of reaching a conclusion that is mathematically exact," have, in addition to all the other evidence bearing on the question, received "the testimony of experts as to the relative costs of doing a local and through business." *Chicago, M. & St.P. R. Co. v. Tompkins*, 176 U. S. 178. The converse is true. What is permissible in an effort to separate costs may also be done in a patent case where it is necessary to separate profits. *Root v. Lake*

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Shore & M. S. Railway Co., 105 U. S. 198. See also *Providence Rubber Co. v. Goodyear*, 9 Wall. 802. In effect, this was attempted in the present case. Witnesses who had been in the employment of the defendant, and who had kept the books, purchased the material, superintended the construction, and fixed the price of the transformers, were not able to show that profits had been made, and consequently were not able to show what part of the profits was attributable to the patent and what to the additions, if found to be noninfringing and valuable improvements.

4. Having, by books and other data, proved to the satisfaction of the master the existence of profits, the plaintiff had carried the burden imposed by law, and established every element necessary to entitle it to a decree, except one. As to that, the act of the defendant had made it not merely difficult but impossible to carry the burden of apportionment. But plaintiff offered evidence tending to establish a legal equivalent. It had proved the existence of a fact which, whether treated as a rule of evidence or as a matter of substantive law, would entitle it to a decree for all the profits. The method was different from that mentioned in the second branch of the rule in the *Garretson* case, 111 U.S. 111 U. S. 121, but the plaintiff had now presented proof to demonstrate its right to the whole of the fund because of the fact that the defendant had inextricably commingled and confused the parts composing it. This result would not be in conflict with the principle which, in the first instance, imposed the burden of proof on the

plaintiff, but merely gave legal effect to a new fact which, as a matter of law, entitled the patentee to a particular judgment. It presented a case where the court was called on to determine the liability of a trustee *ex maleficio*, who had confused his own gains with those which belonged to the plaintiff. One party or the other must suffer. The inseparable profit must be given to the patentee or infringer.

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The loss had to fall on the innocent or the guilty. In such an alternative, the law places the loss on the wrongdoer.

5. It is said, however, that the rule does not apply to patent cases. Why it should be limited does not appear. It is admitted that an injunction may be granted against selling infringing devices even though the result will be to prevent the defendant from using valuable appliances confused with the patented device. And Lord Eldon treated this conceded right to enjoin as an application of the rule relating to the confusion of goods. He therefore restrained the publication of a book, a large portion of which was original, because copyright matter was incorporated therein, saying in *Mawman v. Tegg*, 2 Russ.Ch. 385, 390:

"As to the hard consequences which would follow from granting an injunction when a very large proportion of the work is unquestionably original, I can only say that if the parts which have been copied cannot be separated from those which are original without destroying the use and value of the original matter, he who has made an improper use of that which did not belong to him must suffer the consequence of so doing."

This case was cited and approved in *Callaghan v. Myers*, 128 U. S. 658, where the infringer, who had blended his own with copyright matter in a volume which sold for a profit, was made to "abide the consequences on the same principle that he who has wrongfully produced a confusion of goods must alone suffer." In one of these cases, the original matter was less, and in the other more, than that unlawfully appropriated. In both, as in patent cases, the infringer was a "trustee for the plaintiff in respect of profits." *Root v. Lake Shore & M.S. Railway*, 105 U. S. 214. And the liability is not lessened because the confusion is due to a wrongful appropriation by a trustee *de son tort*, instead of carelessness of a trustee lawfully appointed. Nor is it limited to those cases where

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the patented device is shown to have preponderated in the creation of the profits. The owner of a small part of the fund is as much entitled to the protection of the law as the owner of a larger share. The rule, however, is not intended to penalize the infringer, nor to give the patentee profits to which he is clearly not entitled. So that where, by general evidence, expert testimony, or otherwise, it is shown that his patent is of relatively small value, it will often be possible to prove that, at the utmost, it could not have contributed

to more than a given amounts of the profits. *Lupton v. White*, 15 Vesey Jr. 432-440. In such cases, except possibly against one who had concealed or destroyed evidence or been guilty of gross wrong, the plaintiff's recovery cannot exceed the amount thus proved, even though it be impossible otherwise more precisely to apportion the profits.

6. But when a case of confusion does appear -- when it is impossible to make a mathematical or approximate apportionment -- then, from the very necessity of the case, one party or the other must secure the entire fund. It must be kept by the infringer or it must be awarded by law to the patentee. On established principles of equity and on the plainest principles of justice, the guilty trustee cannot take advantage of his own wrong. The fact that he may lose something of his own is a misfortune which he has brought upon himself, and if, as argued, the fund may have been made by the use of other patents also, for which he may be liable in another case, it is again a misfortune which he has brought upon himself and an instance of a double wrong causing double liability. He cannot appeal to a court of conscience to cast the loss upon an innocent patentee, and by judicial decree repeal the provision of Rev.Stat. § 4921, which declares that, in case of infringement, the complainant shall be entitled to recover the "profits to *be accounted* for by the defendant."

This conclusion is said to be in conflict with the *Garretson*

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and other decisions which, it is claimed, justify the conclusion that the defendant is entitled to retain all of the profits, even where the patentee is unable to make an apportionment. *Warren v. Keep*, 155 U. S. 265. An analysis of the facts of those cases will show that they do not sustain so extreme a doctrine. For they deal with instances where the plaintiff apparently relied on the theory that the burden was on the defendant, and for that or other reasons made no attempt whatever to separate the profits. None of the cases cited discusses the rights of the patentee who has exhausted all available means of apportionment, who has resorted to the books and employees of the defendant, and by them, or expert testimony, proved that it was impossible to make a separation of the profits. This distinction between difficulty and impossibility is involved in the ruling by the Circuit Court of Appeals of the Sixth Circuit in *Brennan & Co. v. Dowagiac Mfg. Co.*, 162 F. 476, where the *Garretson* case was distinguished, and the court said:

"In the present case, the infringer's conduct has been such as to preclude the belief that it had derived no advantage from the use of the plaintiff's invention. . . . In these circumstances, upon whom is the burden of loss to fall? We think the law answers this question by declaring that it shall rest upon the wrongdoer, who has so confused his own with that of another that neither can be distinguished. It is a bitter response for the court to say to the innocent party, 'You have failed to make the necessary proof to enable us to decide how much of these profits are your own,' for the party knows, and the court must see, that such a requirement is impossible to be complied with. The

proper remedy to be applied in such cases is that stated by Chancellor Kent in *Hart v. Ten Eyck*, 2 Johns.Ch. 62, 108, where he said:"

"The rule of law and equity is strict and severe on such occasion. . . . All the inconveniences of the confusion is thrown upon the

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party who produces it, and it is for him to distinguish his own property or lose it."

It may be argued that, in its last analysis, that is but another way of saying that the burden of proof is on the defendant. And no doubt such, in the end, will be the practical result in many cases. But such burden is not imposed by law, nor is it so shifted until after the plaintiff has proved the existence of profits attributable to his invention, and demonstrated that they are impossible of accurate or approximate apportionment. If then the burden of separation is cast on the defendant, it is one which justly should be borne by him, as he wrought the confusion.

7. This conclusion would apparently result in a decree in favor of the appellant. But such an order, under the peculiar facts of this case, would operate to deprive the defendant of the right to a ruling on the exceptions filed to the report. The master held that the entire commercial value of the transformer was due to the invention covered by Claim 4, and that therefore all the profits belonged to the Westinghouse Company. The court, on the other hand, found that the defendant's additions were not infringements, and had contributed to the profits, and that, because of the failure to make a separation, the plaintiff was entitled only to nominal damages. For this reason, it did not specifically pass on defendant's exceptions. Other questions of law and fact involved in the accounting were not considered. Neither the court nor the master discussed the question of apportionment, and the record does not afford satisfactory data for entering a final decree. This no doubt arises from the fact that both parties relied so entirely upon their theory that the burden was on the other that facts were not proved which might otherwise have been established. The decree is therefore reversed, and the case remanded with power to hear and determine motions to amend the pleadings and with directions that the case be recommitted to a master for a new hearing on

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all the questions involved in the original reference, and, on evidence already submitted and such additional testimony as may be offered, for further proceedings not inconsistent with this opinion.

Reversed.

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"The core is preferably composed of thin plates of soft iron . . . separated individually or in pairs from each other by thin sheets of paper or other insulating material. . . . The plates are preferably constructed with two rectangular openings through which the wires pass. . . . Each group of -- say five or six plates -- is preferably separated from the succeeding group by air spaces. These may be produced by passing tubes, which may be of soft iron or other metal, or of vulcanized fiber, along the lengths of the plates. It may be sufficient in other cases to block the group of plates apart at intervals instead of extending the tubes the entire length. Preferably also the primary and secondary coils are separated from each other in a similar manner."

"Where the converter is to be used in the open air, the tube will permit a free circulation of air, and thus aid in keeping the converter cool."

"It may be preferred in some instances to surround the converter with some oil, or paraffin or other suitable material, which will assist in preserving insulation and will not be injured by heating. This material, when in a liquid form, circulates through the tubes and intervening spaces of the coils and plates, and preserves the insulation, excludes the moisture, and cools the converter."

"The entire converter may be sealed into an enclosing case . . . which may or may not contain a nonconducting fluid or gas."

"I claim as my invention . . . 1 . . . ; 2 . . . ; 3. . . ."

"4. The combination, substantially as described, of an electric converter constructed with open spaces in its core, an enclosing case, and a nonconducting fluid or gas in said case, adapted to circulate through said spaces and about the converter."