

WESTERN ELECTRIC MANUF'G Co. v.
ANSONIA BRASS & COPPER CO.

Circuit Court, D. Connecticut. December 12, 1881.

1. LETTERS PATENT—TELEGRAPH WIRES—OLD
PROCESS—NEW USE.

An application of an old process to a new use without substantial alteration or change is not patentable.

Reissued letters patent Nos. 6,954 and 6,955, dated February 29, 1876, and granted to the Western Electric Manufacturing Company, as assignee of Joseph Olmsted, for an improvement in insulating telegraph wires, the invention consisting in the discovery that compression of the paraffine into the pores of the fibrous covering by any well-known mechanical appliance would be advantageous, are void for want of novelty.

In Equity.

Wm. D. Baldwin and *George P. Baront*, for plaintiff.

Wm. B. Wooster, for defendant.

SHIPMAN, D. J. This is a bill in equity, founded upon the alleged infringement of two reissued letters patent granted to the plaintiff, as assignee of Joseph Olmsted, each for an "improvement in insulating telegraph wires," and dated February 29, 1876, and respectively numbered 6,954 and 6,955, and being reissued in two divisions (one for the process and the other for the product) of a patent granted to said Olmsted on July 23, 1872.

The specifications of each reissue are the same, and accurately describe the patented improvement upon the method which was then commonly used for insulating office wire. The entire descriptive part of the two specifications is in these words:

"The method of insulating now in use consists in oraiding over the wire a fibrous covering, after which it is dipped in wax, for the purpose of filling and

closing its pores, and after a subsequent scraping, to remove the surplus wax, it is ready for use. This method is, however, objectionable, inasmuch as it leaves the covering in a very rough and soft condition, and fails to secure perfect insulation. In my improved method, after the wire has received its coating I dip it in paraffine or wax, after which, instead of scraping off the surplus coating, I pass the whole through a suitable machine, which compresses the covering, and forces the paraffine or wax into the pores, and secures perfect insulation. By so compressing the covering, the paraffine or wax is forced into the pores, and the surface becomes and appears polished. Wire insulated in this manner is entirely impervious to the atmosphere, of greater durability, and less cumbersome than any heretofore made.”

The claim of the process patent is for “the method of insulating telegraph wire by first filling the pores of the covering and subsequently compressing this covering, and thereby polishing its surface, substantially as described.”

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The claim of the patent for the product is for “an insulated telegraph wire, the covering of which has its pores filled and its surface polished, substantially as described.”

The defect in the article coated with uncompressed paraffine was a leakage of electricity, which was probably owing to the shrinkage of the paraffine in the interstices of the fibrous covering while the melted paraffine was cooling. The paraffine which was compressed while in a plastic state was thereby forced into the interstices of the fibers and the defect was obviated.

The defendants make and sell telegraph wire, which they say in their answer is “covered by braiding over the wire a fibrous covering, after which it is dipped in a preparation for the purpose of filling and closing

the pores; after which the same is sand-papered and rubbed, and passed through revolving dies, for the purpose of scraping off the surplus material, and consolidating and smoothing the surface of said remaining covering." They further admit that both paraffine and wax are component parts of the material which is used for insulating their wire.

I shall spend no time upon the question of infringement, which I think was clearly shown. The utility of the plaintiff's article was also proved.

The important question in the case is in regard to be patentability of the improvement, which consisted in compressing the plastic paraffine, by suitable machinery, after the fibrous covering and the paraffine had been applied. The mechanism for compressing was so well known that a description was unnecessary. The invention consisted in the discovery that compression of the plastic paraffine into the pores of the fibrous covering, by any well-known mechanical appliances, would be advantageous. It did not consist in the discovery that covering with paraffine or wax would be desirable, for wire covered with braided fibrous covering and dipped in wax was in common use; but the invention simply related to the substitution, in place of a mere scraping off of the rough clots of wax, of a pressing operation for forcing the insulating material into more intimate contact with the fibrous material, and, so far as the product is concerned, the invention related to a wire insulated and polished upon its surface, by means of compression of the waxed covering, as distinguished from the insulation and surface which was the result of non-compression of the same covering.

Dundonald's British patent of 1851, No. 13,698, declares that he employed "bituminous material to cover and thus insulate the conducting 708 wires of electric telegraphs which are intended to be placed underground.* * *" He further says:

“The encasement of this wire with bitumen may also be effected by covering it with a filamentous material, which has been previously saturated with melted bitumen, and then pressing the wire so covered through a heated die or orifice, so as to melt or soften the bitumen upon the filamentous material, and press the whole of the coating against the wire in such a way as to cause it to form one compact, continuous covering of the wire, and thus insure its insulation.”

The same general process of compression is found in Bandorein’s British patent No. 933, of 1857, for electric conductors. The specification says:

“The wire is passed through a bath of hot bitumen, and has the superfluous matter removed by passing through suitable dies or parts to scrape and smooth its surface, and render it of uniform thickness. The first and second ribbons [which are strips of material to be wound on the wire] are also passed through bituminous or other suitable matter to render them more impervious to electricity. The coated and lapped wire is passed through suitable dies to remove superfluous matter, to smooth down the lapping of the ribbons, and to compress and cause their proper adhesion.”

It thus appears that the process of compression had been used, for some years before the date of Olmsted’s patent, in the manufacture of electric telegraph wire previously covered with cloth and then coated with bitumen or fatty substances, and having been so used, there is no longer patentability in compressing the paraffine covering of a wire coated with fibrous material.

The patented process “was simply the application by the patentee of an old process to a new subject, without any exercise of the inventive faculty, and without the development of any idea which can be deemed new or original in the sense of the patent law.” *Brown v. Piper*, 91 U. S. 37. The patentee took the

process of Dundonald and of Bandorein, which they had applied to bitumen, and applied it to the wax covering which was in common use, and had been found to be superior for certain classes of wire to any insulated covering which had been previously used or suggested. The old process was applied to the new use without substantial alteration or change. The process patent not stating a patentable invention, the product patent is in no better condition.

The bill is dismissed.

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