

EDISON ELECTRIC LIGHT CO. v. ELECTRIC ENGINEERING & SUPPLY CO.

(Circuit Court, N. D. New York. February 27, 1896.)

No. 6,071.

PATENTS—LIMITATION OF CLAIMS—ELECTRIC LAMPS.

The Bergmann patent, No. 311,100, for an electric lamp socket, in which is used a disk of noncombustible insulating material (preferably of lava), and a circuit controller key of a special form, must be confined to the precise structures described and shown, and is not entitled to the benefit of the doctrine of equivalents. *Held*, therefore, that it is not infringed by a socket made according to the Hinds patent of 1891, in which the insulating disk is of porcelain, and the circuit controller key is of different structure and operation from that of Bergmann.

This was a bill in equity by the Edison Electric Light Company against the Electric Engineering & Supply Company for alleged infringement of a patent relating to sockets for incandescent electric lamps. On final hearing.

The patent, No. 311,100, on which this action is founded, was granted to Sigmund Bergmann, January 20, 1885, for improvements in sockets for incandescent electric lamps. The improvements relate to sockets designed to receive lamps whose terminals are a screw-threaded ring and a plate on the base of the lamp. The object was to provide a compact socket, having few parts, a small amount of insulating material and a simple circuit-controller. The specification says, among other things,

"A is a disk of insulating material. I prefer to use a non-combustible and non-carbonizable material, such as lava. This is desirable in a socket of this character, because the contacts and terminals are placed close together in a small space, so that there may sometimes be danger of a short circuit between them, and also circuit is continually being made and broken by the socket key, in some cases causing considerable spark. * * * The socket, constructed as described, is of a neat appearance, is very compact, has no useless mass of insulating material, being merely a metal skeleton with just enough insulation to separate the terminals, all the circuit connections being carried by the single insulating disk instead of being divided among two or more insulating portions, as heretofore. The circuit controller making and breaking circuit upon the lamp tip employs fewer parts and is simpler in construction than any heretofore used, while it is very efficient in operation, and the whole may be put together or taken apart with great readiness, the parts being easily separable."

As stated by the patentee the socket is compact and simple. It is of the usual type and differs from those which preceded it in matters of detail only. No minute or extended description is necessary. The socket will be readily understood by reading the above excerpts in connection with the claim. The claims involved are as follows:

"1. In a socket for an electric lamp, the combination of two circuit terminals, one a sleeve adapted to make contact with the band or ring terminal, the other a spring movable into and out of contact with the bottom terminal of the lamp, substantially as set forth."

"3. In a socket for an electric lamp, the combination, with a disk of insulating material, of a contact sleeve for making contact with the band or ring terminal of the lamp, a contact piece for making contact with the bottom terminal of the lamp, and two terminals for the circuit wires leading to the socket, all said socket contacts and terminals being carried by the said insulating disk, substantially as set forth.

"4. In a socket for an electric lamp having two terminals for making connection with corresponding lamp terminals, the combination of a metal supporting portion and a disk of insulating material carried thereby and car-

rying all the terminals and contacts of the socket, substantially as set forth."

"9. The combination, with a contact spring, substantially of the form described, of a separate turning key bearing against said spring, whereby it may be forced upward to make contact, substantially as set forth."

"13. In a socket for electric lamps, the insulating body which supports the terminals or connections, formed of non-combustible material, substantially as set forth."

Claims 1 and 9 relate to the circuit controller; the others to the insulating disk. The defense is that these claims, if valid, must be limited to the precise construction shown and, as so limited, the defendant does not infringe.

Charles E. Mitchell and Richard N. Dyer, for complainant.

Alfred Wilkinson, for defendant.

COXE, District Judge (after stating the facts). It is unnecessary to discuss at length the many questions presented by the elaborate record and briefs for the reason that when subjected to analysis it must be found that Bergmann's claim to invention rests upon two narrow foundations; first, the character of the insulation, and, second, the form of the circuit controller or key. Unless invention can be found in these two features it can be found nowhere.

The use of incombustible insulating material in this art was very old. Soapstone, glass and plaster of paris had been used and porcelain had been suggested by Gordon in 1880. The patentee says: "I prefer to use a non-combustible and non-carbonizable material, such as lava." The character of the insulation is left optional, the patentee merely expressing a preference for material having the characteristics of lava. He does not claim lava or any other material specifically. Assuming that he discovered lava as applied to this art and that its substitution for the materials previously used constituted invention, and, assuming further, that the claims can be limited to lava, it is not easy to see upon what principle he acquired a monopoly of porcelain which is the material used by the defendant. Especially is this true when it is remembered that Bergmann did not use porcelain until two years after the date of his patent, although, as above stated, its use was suggested by Gordon five years prior to that date.

An examination of this record must convince the impartial reader that the use of non-combustible insulating material in this and analogous situations was not new with Bergmann and that its advantages were recognized by a number of electricians long prior to the date of his patent. If the disk claims are construed broadly as covering all kinds of non-combustible insulating materials they are clearly void because non-combustible material had been used in similar combinations, and if these claims are limited to lava the defendant does not infringe for the reason that it uses porcelain and not lava.

If the court were dealing with a foundation patent it is not unlikely that porcelain would be regarded as an equivalent for lava in the same way that soapstone and glass, broadly speaking, might be so regarded. But, as will be seen hereafter, Bergmann is not entitled to the benefit of the doctrine of equivalents. He was the first to use lava. It would seem from the record that no one cares

to dispute his right to its exclusive use. Lava is not the commercially successful insulating material of to-day; porcelain is. To give Bergmann a monopoly of porcelain and all similar substances because he was the first to adopt a material which no electrician wishes to use at the present time, would not only do injustice to the defendant, but to all others who have made or are endeavoring to make improvements in this art.

Circuit breakers in the sockets of incandescent lamps were old at the date of the patent in suit. One of these was before the court in *Schuyler Electric Co. v. This Defendant*, 62 Fed. 588; *Id.*, 13 C. C. A. 491, 66 Fed. 313. It was there held that as early as 1881 a claim for such a device must be limited to the precise mechanism shown and described. Since that date, and prior to the date of Bergmann's application, key circuit controllers operating in a great variety of ways were devised by a number of electricians including Bergmann himself. It is not, of course, pretended that a circuit controller located in a lamp socket was new with Bergmann. All that is claimed for his key is that it is simpler and better than those which preceded it. The specification says:

"The circuit controller making and breaking circuit upon the lamp tips employs fewer parts and is simpler in construction than any heretofore used."

In short, as to both branches of the controversy, it is perfectly obvious that Bergmann was in no sense a pioneer. Unquestionably he produced a simple, compact, durable and efficient socket, but the art did not begin with him and it ought not to be held to end with him. He has originated no new principle of operation; he has produced no new result. He improved upon existing structures. Other inventors should be permitted to do the same. With the exception of claim 13, which, it would seem, is too broad to be upheld upon any rational theory, the claims in question may be sustained if confined to the precise structures described and shown. They cannot, however, be held to suppress improvements which differ from Bergmann as essentially as he differs from the prior art.

When it is remembered that in 1884 and 1885 all experimenters along this line had to deal with a well known lamp and an almost equally well known form of socket, which, of necessity, was required to conform to the changes made from time to time in the lamp base, it is plain that the area of action was necessarily circumscribed. For years both lamp and socket have been of a conventional type. Admitting that the material of the disk and the details of the key construction were new, is it not manifest that the assembling of these well known elements in an old form of socket to receive an old form of lamp did not involve any high order of inventive skill and that the combinations thus formed must be restricted to the mechanism shown?

The defendant's sockets, of course, resemble the Bergmann socket as they do all the sockets in use, but they resemble it only in points which are common to all. They are made under patents granted to Jessie L. Hinds in 1891. The insulating disk is porcelain instead of

lava. The circuit controller is different in many essential particulars. Bergmann's key is insulated at its tip, moves forward and back in the arc of a circle of about 90 degrees, has a slow break, unless care is used, and is provided with a metal hand piece.

The defendant's key has a porcelain hand piece, the key proper being in the circuit. It operates with a cam action and can be turned in either direction an indefinite number of times. There is no possibility of turning the key the wrong way as in the patented device and the circuit is broken by an instantaneous separation of the parts. The defendant does not have the key sleeve and its insulating disk differs from the disk of the patent in structure and operation. The Thomson-Houston socket of the defendant does not have the sleeve terminal of the first claim, but a screw-threaded plug, which, though making mechanical and electrical connection, can in no true sense be termed a sleeve.

Many other points of difference might be pointed out were it necessary to do so, but it is not. To pursue the discussion further would only lead to inconsequential findings as to matters of detail without useful result. If the broad construction contended for by the complainant were permissible the defendant would, unquestionably, infringe, but with the limited construction made necessary by the prior art and by the language of the patent it is equally manifest that the defendant does not infringe. Upon the whole case the court is satisfied that Bergmann was simply an improver upon the prior art in matters of detail only and that he must be confined strictly to what he has described and shown. Hinds was also an improver and in using the socket covered by the Hinds patents the defendant does not trespass on any territory belonging to Bergmann. There are many points of similarity between Hinds and Bergmann, but they are features free to both. The features which were new with Bergmann the defendant does not use.

The bill is dismissed.

YPSILANTI DRESS-STAY MANUF'G CO. v. VAN VALKENBURG et al.

(Circuit Court, N. D. New York. February 29, 1896.)

No. 6,198.

1. PATENTS—NOVELTY AND INVENTION—GARMENT STAYS.

The Bowling patent (original No. 362,568, reissue No. 11,009), for improvements in stays for garments, consisting in securing the stiffening blade between sheets of rubber projecting beyond the blade both at its ends and edges, the rubber being covered with fabrics of similar dimensions, which are made to adhere thereto by pressure between warm plates, *held void* as to claim 1, for want of patentable invention, in view of the prior state of the art.

2. SAME—INVENTION.

Invention cannot be predicated of the popularity of the article alone, as the success thereof may be accounted for by superior workmanship, attractive manner of display, and the energy and ability with which it is introduced to the market.