

CELLULOID MANUF'G Co. v. ARLINGTON MANUF'G Co. *et al.*

(Circuit Court of Appeals, Third Circuit. November 15, 1892.)

PATENTS FOR INVENTIONS—LIMITATION OF CLAIM.

Letters patent No. 199,908, issued February 5, 1878, to the Celluloid Manufacturing Company, for an "improvement in the manufacture of sheets of celluloid and other plastic compositions," while covering an invention of a primary character, and therefore entitled to a liberal construction, are restricted by the terms of the claims and specifications to the use of a slab of celluloid fastened for the purpose of planing into thin sheets to a grooved or channeled plate through the agency of heat, pressure, and the contractile energy of the material in cooling, and are therefore not infringed by a device made under patent No. 387,947, issued August 14, 1888, to Francis Curtis, wherein the celluloid slab is held on a perfectly smooth plate by atmospheric pressure and adhesion only. 44 Fed. Rep. 81, affirmed.

Appeal from the Circuit Court of the United States for the District of New Jersey.

In Equity. Bill by the Celluloid Manufacturing Company against the Arlington Manufacturing Company and others for infringement of a patent. The circuit court dismissed the bill, (44 Fed. Rep. 81,) and complainant appeals. Affirmed.

Rowland Cox and Frederic H. Betts, for appellant.

John R. Bennett, for appellees.

Before ACHESON and DALLAS, Circuit Judges, and WALES, District Judge.

ACHESON, Circuit Judge. This is an appeal from the decree of the circuit court of the United States for the district of New Jersey in a suit in equity brought by the Celluloid Manufacturing Company, the appellant here, against the Arlington Manufacturing Company and others, for the alleged infringement of letters patent No. 199,908, dated February 5, 1878, for an "improvement in the manufacture of sheets of celluloid and other plastic compositions," granted to the first-named company, as assignee of John W. Hyatt, the inventor. The case, as presented to us, involves the single question of infringement, and the determination of that question depends upon the construction to be given to certain of the claims of the patent. The invention (the specification of the patent declares) "relates to an improved apparatus and process for the manufacture of sheets of plastic composition, and, in the present instance, is applied to the article known as 'celluloid.'" At the opening of the specification the following explanatory statements occur:

"Heretofore the great obstacle to successfully planing or reducing plastic or pliable material to sheets by securing it upon a surface and then feeding it to a fixed cutting edge has been that the material was apt to rise from the surface supporting it, and ride up the knife; thus cutting the material irregularly, or arresting the operation. Hence, to hold the slab of material firmly upon the surface sustaining it pending the operation of shaving or planing it into strips has been esteemed a great *desideratum*, and is one of the objects effected by the mechanism and process hereinafter set forth."

"The objects of the invention are accomplished by causing the union in a single slab of a number of sheets or pieces of celluloid, this being effected by

means of pressure and heat, which contemporaneously amalgamate the sheets into a slab, and also force portions of the under side thereof into channels or inclined grooves in the surface upon which the slab rests, which grooves are so arranged that upon the hardening and shrinking of the material the portions thereof in the grooves operate as a series of hooks or clutches to retain the slab in place, after which the plate supporting the slab is placed upon a machine for planing, whereby the material is shaved or planed off in sheets or pieces of any desired thickness, according to the capacity of the machine, the sheets being subsequently dried in open frames, whereby they acquire and retain formation."

It is further stated that unseasoned celluloid, when heated above 150° Fahrenheit, becomes plastic, and can be easily manipulated so long as it is warm, but, becoming cool, it hardens, and while losing its caloric has a slight tendency to shrink. The specification proceeds to set forth an apparatus whereby the objects of the invention are accomplished, and describes the base or bed plate, upon which the slab of celluloid is to be mounted, as having in the central portion of its upper surface a slightly raised boss, the entire upper surface of which is covered by grooves and intermediate ridges or elevations; these grooves, on either side of the vertical longitudinal center of the boss, inclining inward and downward towards the vertical central longitudinal plane of the plate. The purpose of this construction, it is stated, may be effected, though not so satisfactorily, by means of apertures of any desired form which have an inclination downward towards the said plane; the apertures, or some of them, on opposite sides of the said center of the plate, having similar inclinations towards the said central plane. The described operation of forming the slab and fixing it securely upon the plate is briefly this: A number of rough sheets of crude celluloid are superposed, one above the other, upon the bed plate in a chase or mold, and by the application of hydraulic pressure and of heat the celluloid is softened and solidified, the lower part of the plastic mass being forced into and completely filling the grooves on the face of the boss. Then, after the application of water or other cooling agent, whereby the celluloid is chilled and hardened in place, the chases, or sides of the press, are removed, "and the material is found in a homogeneous slab secured upon the boss." The specification here states:

"Being exposed to the air, the celluloid shrinks somewhat, which causes the portion thereof which has been forced into the inclined grooves to operate as clutches or hooks, grasping the metal with immense power, and holding the slab firmly by a tension towards the center against any movement or force, either lateral or upward. Thus is the prime object of the invention accomplished."

We do not deem it necessary to set forth with particularity the other two steps of the Hyatt process, namely, the cutting and drying of the sheets, and hence we pass over so much of the specification as relates to the same and to the devices employed therein. Near the close of the specification we find the following paragraphs relating to the first step of the process:

"It is obvious that, after one of the slabs has been shaved off, leaving only a thin film of celluloid upon the plate, a second slab may be secured thereon

by means of solution, cement, or other suitable solvents, that will cause the slab to unite homogeneously with the film remaining upon the plate, when the slab thus attached may be manipulated the same as though secured upon the plate in the manner first above detailed."

"The plate, A, may be grooved laterally or otherwise, and bars of wood secured in the grooves so as to be flush with, or slightly above, the surface of the plate, and the slab formed upon this formation."

Then follows this pregnant statement:

"The purpose of retaining the slab in position may be effected also by vertical apertures in the plate, or, in fact, apertures or elevations of any order in or upon or about which the plastic composition can be forced, and there permitted to harden; the essence of this element of the invention being to affix a plate (slab) of plastic composition upon a plate immovably by combined heat and pressure and subsequent cooling."

The patent has 31 claims, but infringement by the defendants of the 28th, 30th, and 31st claims only is affirmed. Those claims are as follows:

"(28) The within-described process of making sheets of plastic composition, which consists—*First*, in forming and causing the adhesion of a slab of the composition to a plate; *second*, subjecting such slab to the operation of a plane to reduce it to sheets; and, *third*, drying the sheets thus produced in a frame, substantially as set forth."

"(30) A slab of plastic composition, fixed upon a bed or plate by the means substantially as herein specified, for the purpose of enabling the division or planing of the slab, substantially as set forth."

"(31) A plate carrying a slab of plastic composition affixed thereon by means of heat and pressure, substantially as set forth, and for the purposes specified."

The court below was of the opinion that the letters patent in suit are limited to an apparatus and process whereby the slab of celluloid is affixed to a supporting surface during the operation of planing it into sheets by the employment of the contractile power of the material developed in the cooling of the heated mass, and therefore adjudged that the defendants did not infringe any of the claims of the patent by the use of an all-metal plate, having a perfectly smooth surface, to which the block of celluloid is held by atmospheric pressure and adhesion only, agreeably to the method described in and covered by letters patent No. 387,947, dated August 14, 1888, issued to Francis Curtis, assignor to the Arlington Manufacturing Company, one of the appellees. The construction which the court below thus gave to the patent in suit is the same it received in the case of *Celluloid Manuf'g Co. v. American Zylonite Co.*, 31 Fed. Rep. 904, a suit on this patent in the circuit court of the United States for the district of Massachusetts, Mr. Justice GRAY there delivering the opinion of the court. If the court below was right in its views as to the scope of the Hyatt patent, its conclusion upon the question of infringement was indisputably correct, for clearly, in the practice of the defendants' method of securing the slab of celluloid to a smooth metal plate, the contractile force of the material is not utilized. This the appellant's expert, Mr. Brevoort, concedes. He testifies that in the defendants' method "there is no holding due to the shrinking of the material

as it cools;" and he admits that if the claims are limited to a block fixed to the plate "by the power it exerts in shrinking, then the defendants do not infringe."

We are therefore brought to the consideration of the controlling question, what is the true construction of the patent in suit, with particular reference to the three claims alleged to be infringed by the defendants? Now, we agree with the appellant that the patent describes and claims a process. But what is the nature of that process? The specification gives no uncertain answer. From first to last—as our above quotations demonstrate—it lays special stress upon the shrinking quality of the celluloid in cooling, and its consequent exercise of a contractile agency in holding the slab to the plate in a fixed position, while it is subjected to the strain of the plane. Thus, at the outset, it is stated that, upon the hardening and shrinking of the material, the portions thereof in the grooves operate as a series of hooks or clutches to retain the slab in place. Then, after describing the operation of forming the slab by heat and pressure, it is stated that upon exposure to the air the celluloid shrinks somewhat, which causes the portions which have been forced into the inclined grooves to act as clutches or hooks, grasping the metal with immense power, and holding the slab firmly by a tension towards the center against any movement or force, either lateral or upward. Then follows the significant declaration, "Thus is the prime object of the invention accomplished." In the face of this announcement, how can it be said that the utilization of the contractile energy of the slab is not a necessary feature of the patented process? But this is not all. The specification proceeds to state that the purpose of retaining the slab in position may be effected by vertical apertures, or by apertures or elevations of any order, in or upon or about which the plastic composition can be forced, and there permitted to harden; "the essence" of this step of the invention being to affix the slab upon a plate immovably "by combined heat and pressure and subsequent cooling." The subsequent cooling is thus declared to be of the substance of the invention. It will be perceived that Hyatt's real discovery was not that celluloid, in cooling, would shrink, but that the contractile energy thereby developed could be turned to the achievement of that which had been "esteemed a great *desideratum*," namely, the affixing of a slab of the material upon the sustaining surface immovably; and the conception is well expressed in the first claim of the patent:

"A slab of material secured upon a surface through the operation of the power it exerts in shrinking acting upon two or more elevations or depressions on or in the surface on which the slab is placed."

The specification throughout contemplates the interlocking of the slab with the plate by its own action—its contractile power—under heat, pressure, and subsequent cooling. This is the underlying principle of the invention disclosed by the patent. No other agency for accomplishing the desired result is suggested, nor is any other fairly deducible from anything set forth in the specification. The method, briefly referred to, of uniting homogeneously a second block with the film of celluloid left

on the plate, obviously is a mere modification of the first-described operation, and introduces no different principle. Nor does the suggested form of plate, with bars of wood secured in the grooves, so as to be flush with or slightly above the surface of the plate, indicate any departure from the interlocking and clinching action. In his original deposition, Mr. Brevoort, upon this point, testified:

"This method, like the first one, contemplates an interlocking of the slab with the plate; the wood presenting, by reason of its structure, spaces within which portions of the block could penetrate and harden."

This, we think, is the natural and correct view, and it is confirmed by the testimony of Mr. Hyatt, who states:

"Before I made use of either of these particular forms of apertures, I caused the block of celluloid to adhere to a piece of coarse-grained wood, by means of solvents of the celluloid, and also by heat and pressure, which caused the celluloid to enter the pores or interstices of the wood, and which held the blocks while being cut into sheets."

But, as we have seen, the defendants not only dispense with all grooves, apertures, and elevations and their equivalents,—using a perfectly smooth surface all metal plate,—but they employ a force to retain the slab of celluloid in place entirely different from that of the Hyatt invention, and operating in a different way. In a word, the two processes differ in principle.

Now, undoubtedly, where an invention is meritorious, and of a primary character, as seems to be the case here, the patent should be liberally interpreted, so as to secure to the patentee his real invention as he has disclosed it to the public by his specification; and, if it be for a process, he should be protected from the unauthorized practice of it by others, by whatsoever modes or forms of apparatus they may apply the process. *Tilghman v. Proctor*, 102 U. S. 707; *Machine Co. v. Lancaster*, 129 U. S. 263, 9 Sup. Ct. Rep. 299; *Bene v. Jeantet*, 129 U. S. 683, 9 Sup. Ct. Rep. 428. The appellant's pretensions, however, far transcend the limits of these settled and just rules. Virtually the appellant claims all means, however differing in mode of action and principle from the process described in the patent, whereby a slab of celluloid is caused to adhere to a plate for the purpose of planing it into sheets. But a construction which would so expand the appellant's exclusive rights is altogether inadmissible under the terms here chosen to express the invention. *McClain v. Ortmyer*, 141 U. S. 419, 12 Sup. Ct. Rep. 76.

As was said with reference to a patent for a process in *Tilghman v. Proctor*, 102 U. S. 729, 730, so is it to be said here, that the true meaning of the claims is to be sought by comparing them with the context of the specification; the description therein contained giving to the claims the proper construction and qualification. Moreover, claim 28 is expressly for "the within-described process," and each of the three claims here in question has the clause, "substantially as set forth," which connects the claim with the specification, and thus limits it. *The Cornplanter Patent*, 23 Wall. 218.

In this connection we deem it worthy of notice that claim 30, as originally formulated, read: "A slab of plastic composition fixed upon a bed or plate by mechanical or adhesive action," etc.; but, pending the proceedings in the patent office, the applicant, by his own voluntary act, it would seem, amended the claim by striking out the words, "mechanical or adhesive action," and substituting the clause, "by the means substantially as herein specified,"—a change which appears to us to indicate an intention on his part entirely inconsistent with the position upon which the appellant now insists.

Upon the most careful consideration of the whole case, we cannot avoid the conclusion that the court below rightly construed the specification and claims of the patent; and accordingly the decree must be affirmed.

HUNT v. MOLINE PLOW Co.

(Circuit Court, N. D. Illinois, S. D. October 31, 1892.)

PATENTS FOR INVENTIONS—LICENSE—ROYALTY—RESCISSION OF CONTRACT.

Before the issue of a patent the patentee agreed to grant an exclusive license to manufacture under it, in consideration of the licensee's agreement to pay a certain royalty, the agreement providing that, if the licensee should decide at any time not to continue making the patented device, then the license and the agreement should be surrendered without damage to either party. The licensee, having found that the patent, when issued, did not include all the claims he supposed it did, notified the patentee that he could not go on with the contract, paid him royalty on all the machines made up to that time, and proceeded to make others under a different patent, embodying substantial changes in the machine. *Held*, that the patentee was not entitled to royalty after he received said notice.

In Equity. Suit by Homer H. Hunt against the Moline Plow Company for an accounting for royalties for the use of a patent. Bill dismissed.

John G. Manahan, for complainant.

Bond, Adams & Rickard, for defendant.

BLODGETT, District Judge. The bill in this case seeks an accounting from the defendant to the complainant for the use of a patent, of which the complainant is assignee, granted to George W. Hunt, September 25, 1883, for a "wheel plow." The facts as they appear from the proof are substantially these: The patent in question was applied for by George W. Hunt on the 14th of December, 1882, and in the spring of 1883, some time in April, he brought to the shop of the defendant in Moline, Ill., a plow, which he represented was constructed in accordance with his patent. Some of the officers and managers of the defendant examined the plow, and from that inspection concluded that it would be a useful and profitable plow for the defendant to manufacture; and after some negotiation the parties entered into an agreement, which is called "Exhibit D" in the proofs, in the following words: