Cuno Engineering Corp. Vs. Automatic Devices Corp.

Cuno Engineering Corp. Vs. Automatic Devices Corp.

SooperKanoon Citation : sooperkanoon.com/97131

Court : US Supreme Court

Decided On : Nov-10-1941

Appeal No. : 314 U.S. 84

Appellant : Cuno Engineering Corp.

Respondent : Automatic Devices Corp.

Judgement :

Cuno Engineering Corp. v. Automatic Devices Corp. - 314 U.S. 84 (1941)
U.S. Supreme Court Cuno Engineering Corp. v. Automatic Devices Corp., 314 U.S. 84 (1941)

Cuno Engineering Corp. v. Automatic Devices Corp.

No. 37

Argued October 22, 23, 1941

Decided November 10, 1941

314 U.S. 84

CERTIORARI TO THE CIRCUIT COURT OF APPEALS

FOR THE SECOND CIRCUIT

SYLLABUS

1. Claims 2, 3, and 11 of the Mead patent, No. 1,736,544, for improvements in lighters (commonly used in automobiles) for cigars, cigarettes, and pipes, *held* invalid for want of invention. P. 314 U. S. 88 .

2. Mead's addition to the so-called wireless or cordless lighter of a thermostatic control -- which, after the plug was set "on" and the heating coil had reached the proper temperature, automatically returned the plug to its "off" position -- was not invention, but a mere exercise of the skill of the calling, and an advance plainly indicated by the prior art. P. 314 U. S. 89 .

3. That Mead's combination performed a new and useful function did not make it patentable. The new device, however useful, must reveal the flash of creative genius, not merely the skill of the calling. P.9 900.

117 F.2d 361 reversed.

Page 314 U. S. 85

Certiorari, 313 U.S. 553, limited to the question whether claims 2, 3, and 11 of the Mead patent No. 1,736,544 are valid. In a suit for infringement, the judgment of the District Court that the claims were not infringed, 34 F.Supp. 146, was reversed by the Circuit Court of Appeals, which held them valid and infringed.

MR. JUSTICE DOUGLAS delivered the opinion of the Court.

This is an action in equity brought by respondent for infringement, *inter alia,* upon claims 2, 3, and 11 of patent No. 1,736,544, granted November 19, 1929, on the application of H. E. Mead, filed August 24, 1927, for a cigar lighter. The District Court held these claims not infringed. 34 F.Supp. 146. The Circuit Court of Appeals reversed, holding them valid and infringed. 117 F.2d 361. We granted the petition for certiorari, limited to the question whether claims 2, 3, and 11 of the Mead patent are valid, because of a conflict between the decision below and *Automatic Devices Corp. v. Sinko Tool & Manufacturing Co.,* 112 F.2d 335,

decided by the Circuit Court of Appeals for the Seventh Circuit.

The claims in question [Footnote 1] are for improvements in lighters,

Page 314 U. S. 86

commonly found in automobiles, for cigars, cigarettes, and pipes. There were earlier lighters of the "reel type." The igniter unit was connected with a source of current by a cable which was wound on a spring drum so that the igniter unit and cable could be withdrawn from the socket and be used for lighting a cigar or cigarette. As the removable plug was returned to the socket, the wires were reeled back into it. The circuit was closed either by manual operation of a button or by withdrawal of the igniter from its socket. In 1921, the Morris patent (No. 1,376,154) was issued for a so-called "wireless" or "cordless" lighter. This lighter eliminated the cables and the mechanism for winding and unwinding them, it provided for heating the igniter unit without removing it from its socket, and it eliminated all electrical and mechanical connection of the igniter unit with the socket once it was removed therefrom for use. Several types of the "wireless" or "cordless" lighter appeared. [Footnote 2] Morris represented a type in which the circuit was open when the plug rested

Page 314 U. S. 87

in the socket and closed when the plug was pushed farther into the socket against the resistance of a spring. In Zecchini (No. 1,437,701), the operator pressed and held down a push-button to close the circuit. In Metzger (No. 1,622,334), the operator closed the circuit by depressing and rotating the plug. In each, the operator was obliged to hold the plug, or the circuit-closing part, in place until the heating coil became hot enough for use. After he concluded that it had become hot enough (by observation or guesswork), he removed the plug, using it like a match or hot coal, and then replaced it in the socket. Thus, these lighters were said to require rather continual attention on the part of the person using them, so that there would be no overheating or burning out of the heating coil.

This inconvenience and hazard were eliminated, according to respondent, [Footnote 3] by the automatic feature of the Mead patent. Mead added to the so-called "wireless" or "cordless" lighter a thermostatic control responsive to the temperature of the heating coil. In operation, it automatically returned the plug to its "off" position after the heating coil had reached the proper temperature. To operate Mead's device, the knob on the igniter plug was turned to a point where an electrical connection was established from the battery through the heating coil. There, the plug remained temporarily latched. When the heating coil was sufficiently hot for use, the bimetallic elements in the thermostat responsive to the temperature condition of the heating coil caused the igniter plug to be released and to be moved by operation of a spring to open-circuit position. The plug might then be manually removed for use in the manner of a match, torch, or ember.

Page 314 U. S. 88

When replaced in the socket after use, it was held in open-circuit position until next needed.

Petitioner makes several objections to the validity of the claims -- that they do not comply with the standards for full, clear, and concise description prescribed by 35 U.S.C. 33, R.S. 4888; that they are indefinite and broader than any disclosed invention, and that they are for a device so imperfect and unsuccessful that a construction of the claims broad enough to include it is not permissible. *See Deering v. Winona Harvester Works,* 155 U. S. 286 , 155 U. S. 295 . We do not, however, stop to consider these objections. For it is our opinion that the Mead device was not the result of invention but a "mere exercise of the skill of the calling," an advance "plainly indicated by the prior art." *Altoona Publix Theaters, Inc. v. American Tri-Ergon Corp.,* 294 U. S. 477 , 294 U. S. 486 .

Thermostatic controls of a heating unit, operating to cut off an electric current energizing the unit when its temperature had reached the desired point, were well known to the art when Mead made his device. They had been employed in a wide variety of electrical designs since Hammarstrom in 1893 (No. 493,380) showed a bimetallic thermostat to break a circuit when it got overcharged. A few examples

will suffice. Harley, in 1907 (No. 852,326), included such a thermostat in an electric heater for vulcanizing, so as to limit automatically the temperature attainable. Andrews, in 1912 (No. 1,025,852), showed a bimetallic thermostat in an electrical flat iron designed to open the circuit at a predetermined temperature. In 1919, Newsom (No. 1,318, 168) showed an electric coffee cooker in which a thermostat, actuated by the temperature within the receptacle, operated to open and close the circuit intermittently. Stahl, in 1921 (No. 1,372,207), showed an electric switch automatically released by operation of a thermostat. Hurxthal, in 1925 (No. 1,540,628), showed an electric bread toaster with a

thermostat for stopping the toasting when the bread reached a given degree of temperature. Copeland (No. 1,844,206), filed April 18, 1927, before Mead, showed an electric lighter for cigars and cigarettes with thermostatic control. It differed from Mead in several respects. Thus, in Copeland's device, a cigar was inserted in a tube at the end of which was a heating coil. By pressing the cigar against the heating coil (or in another form, by pressing a push-button), a spring was overset and the circuit closed. When the desired temperature of the heating unit was reached, a thermostatic bar pushed back the spring and opened the circuit. Thus, in the Copeland device, the cigar (or the push-button) was the "means for moving" the "heating member" of the Mead claims so as to establish the energizing electric heating circuit. The advance of Mead over Copeland was the use of the removable plug bearing the heating unit, as in Morris, to establish the automatically controlled circuit of Copeland.

And so the question is whether it was invention for one skilled in the art and familiar with Morris and Copeland, and with the extensive use of the automatic thermostatic control of an electric heating circuit, to apply the Copeland automatic circuit to the Morris removable heating unit in substitution for a circuit manually controlled.

To incorporate such a thermostatic control in a so-called "wireless" or "cordless" lighter was not to make an "invention" or "discovery" within the meaning of the

patent laws. As we have shown, both the thermostatically controlled heating unit and the lighter with a removable plug bearing the heating unit were disclosed by the prior art. More must be done than to utilize the skill of the art in bringing old tools into new combinations. *Hailes v. Van Wormer,* 20 Wall. 353, 87 U. S. 368 ; *Pickering v. McCullough,* 104 U. S. 310 ; *Thatcher Heating Co. v. Burtis,* 121 U. S. 286 , 121 U. S. 294 ; *Concrete Appliances Co. v. Gomery,* 269 U. S. 177 , 269 U. S. 184 -185; *Powers-Kennedy Contracting Corp. v. Concrete*

Page 314 U. S. 90

Mixing & Conveying Co., 282 U. S. 175 , 282 U. S. 186 ; *Carbice Corp. v. American Patents Dev. Co.,* 283 U. S. 420 . Respondent, however, contends that wholly new functions were involved in Mead's conception -- *viz.,* relieving the operator of the necessity of manually holding the plug in closed-circuit position, and automatically and permanently opening the circuit when the heating coil was at the temperature predetermined for its proper use. And, respondent argues, Mead's new combination had an entirely different mode of operation from any "wireless" lighter then in existence, and from any thermostatically controlled electric device. [Footnote 4]

We may concede that the functions performed by Mead's combination were new and useful. But that does not necessarily make the device patentable. Under the statute, 35 U.S.C. 31, R.S. 4886, the device must not only be "new and useful," it must also be an "invention" or "discovery." *Thompson v. Boisselier,* 114 U. S. 1 , 114 U. S. 11 . Since *Hotchkiss v. Greenwood,* 11 How. 248, 52 U. S. 267 , decided in 1851, it has been recognized that, if an improvement is to obtain the privileged position of a patent, more ingenuity must be involved than the work of a mechanic skilled in the art. *Hicks v. Kelsey,* 18 Wall. 670; *Slawson v. Grand Street R. Co.,* 107 U. S. 649 ; *Phillips v. Detroit,* 111 U. S. 604 ; *Morris v. McMillin,* 112 U. S. 244 ; *Saranac Automatic Machine Corp. v. Wirebounds Patents Co.,* 282

Page 314 U. S. 91

U.S. 704; *Honolulu Oil Corp. v. Halliburton,* 306 U. S. 550 . "Perfection of workmanship, however much it may increase the convenience, extend the use, or diminish expense, is not patentable." *Reckendorfer v. Faber,* 92 U. S. 347 . The principle of the *Hotchkiss* case applies to the adaptation or combination of old or well known devices for new uses. *Phillips v. Detroit, supra; Concrete Appliances Co. v. Gomery, supra; Powers-Kennedy Contracting Corp. v. Concrete Mixing & Conveying Co., supra; Electric Cable Joint Co. v. Brooklyn Edison Co.,* 292 U. S. 69 ; *Altoona Publix Theaters, Inc. v. American Tri-Ergon Corp., supra; Textile Machine Works v. Louis Hirsch Textile Machines, Inc.,* 302 U. S. 490 ; *Toledo Pressed Steel Co. v. Standard Parts, Inc.,* 307 U. S. 350 . That is to say, the new device, however useful it may be, must reveal the flash of creative genius, not merely the skill of the calling. If it fails, it has not established its right to a private grant on the public domain.

Tested by that principle, Mead's device was not patentable. We cannot conclude that his skill in making this contribution reached the level of inventive genius which the Constitution, Art. I, 8, authorizes Congress to reward. He merely incorporated the well known thermostat into the old "wireless" lighter to produce a more efficient, useful, and convenient article. *Cf. Electric Cable Joint Co. v. Brooklyn Edison Co., supra.* A new application of an old device may not be patented if the "result claimed as new is the same in character as the original result" (*Blake v. San Francisco,* 113 U. S. 679 , 113 U. S. 683), even though the new result had not before been contemplated. *Pennsylvania R. Co. Co. v. Locomotive Engine Safety Truck Co.,* 110 U. S. 490 , 110 U. S. 494 , and cases cited. Certainly the use of a thermostat to break a circuit in a "wireless" cigar lighter is analogous to or the same in character as the use of such a device in electric heaters, toasters, or irons, whatever may be the difference in detail of design. Ingenuity

Page 314 U. S. 92

was required to effect the adaptation, but no more than that to be expected of a mechanic skilled in the art.

Strict application of that test is necessary lest, in the constant demand for new appliances, the heavy hand of tribute be laid on each slight technological advance in an art. The consequences of the alternative course were forcefully pointed out by Mr. Justice Bradley in *Atlantic Works v. Brady,* 107 U. S. 192 , 107 U. S. 200 :

"Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country without contributing anything to the real advancement of the art. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith."

Cf. Mr. Justice Campbell dissenting in *Winans v. Denmead,* 15 How. 330, 56 U. S. 344 -345, 56 U. S. 347 ; Hamilton, Patents and Free Enterprise, Mon. No. 31, Investigation of Concentration of Economic Power, Temporary National Economic Committee, 76th Cong., 3d Sess., ch. VIII (1941).

Such considerations prevent any relaxation of the rule of the *Hotchkiss* case as respondent would seem to desire.

Reversed.

MR. JUSTICE FRANKFURTER concurs in the result.

[Footnote 1]

"2. In a device of the class described, a removable heating member having an electrical heating unit, a socket for receiving and holding said heating member, electrical current supply terminals, means for moving said heating member to a position for establishing an energizing circuit to said heating unit, and means responsive to the temperature of said heating unit for interrupting said energizing circuit."

"3. In a lighting device for cigars and the like, a removable heating member having an electric heater, a support for receiving and holding said heating member, current supply terminals on said support, said heating member being movable on said support to a position where said heating unit is energized from said terminals and means responsive to the temperature of said heating unit for controlling the heating thereof."

"11. In an electric lighter of the class described, a base member, a heater member moveably mounted on said base member, an electric heater on said heater member, electrical supply terminals on said base member, said heater member being movable between an energized position where a circuit is established from said terminals to said heater, and an off position where said circuit is interrupted, and automatic means for withdrawing said heater member from the on position to the off position upon heating of said heater."

[Footnote 2]

Some of these are reviewed in *Casco Products Corp. v. Sinko Tool & Mfg. Co.,* 116 F.2d 119.

[Footnote 3]

A patent holding company which holds the Mead patent under mesne assignments. No issue, however, is raised under the assignment statute.

[Footnote 4]

Respondent argues that Mead's combination was different from any prior thermostatic device because, in the latter, the operation of the thermostat was placed either under the control of some other thing, such as the sole plate of an electric iron or under the control of an auxiliary resistance. The point is that, in Mead's combination, the effective operation of the thermostat was placed under the sole control of the temperature of the working resistance. We agree, however, with the court below that any such difference was merely one of detail of design, on which Mead's invention cannot rest. In any case, it is the temperature created

in the vicinity of the thermostat that is effective. The manner in which it is transmitted to the thermostat does not rise to the dignity of a patentable device.

MR. CHIEF JUSTICE STONE.

I concur in the result.

I agree that the use of the well known thermostatically controlled heating circuit exemplified by Copeland, with the removable wireless heating unit plug of Morris, in substitution for the manually controlled circuit which had

Page 314 U. S. 93

previously been used with the plug, exhibited no more than the skill of the art. The doubt which the court below resolved in favor of patentability because Copeland's invention was "stillborn" should, I think, have been resolved in favor of petitioners, because Mead was likewise stillborn so far as its substantial commercial success is concerned.

The commercially successful structure for which respondent claims the protection of the Mead patent and which the court below thought satisfied a felt need, is not the structure described by Mead. Both embody the combination of a thermostatically controlled heating circuit with a heating unit borne on a removable wireless plug and used as a means to close the circuit. But they differ structurally in a number of particulars.

To mention only the more important, Mead showed a rotatable socket which is turned by manually rotating the plug when placed in the socket, so as to close the heating circuit. A laterally extending pin projecting from the side of the plug in the Mead structure engages with a spring latch outside the socket to hold the plug and socket in the circuit closing position to which they have been rotated until the latch is released by the thermostatic control, thus permitting the plug and the socket, which is activated by a spring, to rotate back to the open circuit position. The base required for the accommodation of the rotating socket and its externally operated mechanism was large and cumbersome. Respondent's commercial structure, like

the alleged infringing device, utilizes a fixed socket within which the thermostatic circuit control is located and into which the heat unit carrying plug may be inserted without necessity of rotating it, as in the case of the rotating plug with the projecting pin shown by Mead. The thermostatically controlled circuit is closed by pressing the plug further into the socket, the plug being restored to an open circuit position by a spring carried on

Page 314 U. S. 94

the plug, when the latch maintaining the closed circuit is thermostatically released.

The commercially exploited device, because of the differences in its structure from that shown by Mead, is the more compact and easily operated. Its utility as a lighter to be located on the dash of an automobile, which is said to be the merit of the Mead invention, is obvious. If the improvements resulting in such utility involved invention, it is not the invention of Mead. If they exhibited only the skill of the art, their success cannot be relied on to establish invention by Mead, who did not show or make them. The case is therefore not one for the application of the doctrine that commercial success or the manifest satisfaction of a felt need will turn the scale in favor of invention.

MR. JUSTICE FRANKFURTER joins in this opinion.