ANDERSON'S-BLACK ROCK, INC. *v.* PAVEMENT SALVAGE CO., INC.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 45. Argued November 10, 1969—Decided December 8, 1969

Respondent brought this action for infringement of a patent for "Means for Treating Bituminous Pavement." The patent sought to solve the problem of a cold joint on "blacktop" paving by combining known elements, a radiant-heat burner, a spreader, and a tamper and screed, on one chassis. The District Court, finding that all the inventor had done was to construct known elements in the prior art on a single chassis, held the patent invalid. The Court of Appeals reversed. *Held:* While the combination of old elements performed a useful and commercially successful function it added nothing to the nature and quality of the previously patented radiant burner, and to those skilled in the art the use of the old elements in combination was not an invention under the standard of 35 U. S. C. § 103. Pp. 59–63.

404 F. 2d 450, reversed.

Alan W. Borst argued the cause for petitioner. With him on the brief was *Nathaniel L. Leek.*

Walter J. Blenko, Jr., argued the cause and filed a brief for respondent.

MR. JUSTICE DOUGLAS delivered the opinion of the Court.

Respondent brought this action against petitioner for infringement of United States Patent No. 3,055,280 covering "Means for Treating Bituminous Pavement." The patent was assigned to respondent by one Neville.

Bituminous concrete—commonly called asphalt or "blacktop"—is often laid in strips. The first strip laid usually has cooled by the time the adjoining strip is to be laid, creating what is known as a cold joint.

Because bituminous concrete is pliable and capable of being shaped only at temperatures of 250° to 290° F., the cold joint results in a poor bonding between the strips. Water and dirt enter between the strips, causing deterioration of the pavement.

Respondent's patent sought to solve the problem of the cold joint by combining on one chassis (1) a radiant-heat burner for heating the exposed edge of the cold strip of pavement; (2) a spreader for placing bituminous material against that strip; and (3) a tamper and screed, for shaping the newly placed material to the desired contour and surface.

The standard paving machine in use prior to respondent's claimed invention combined on one chassis the equipment for spreading and shaping the asphalt, and it is unquestioned that this combination alone does not result in a patentable invention. Petitioner's alleged infringement resulted from its placing of a radiant-heat burner on the front of a standard paving machine, thus allowing its machine to perform the same functions with the same basic elements as those described in respondent's patent.

The use of a radiant-heat burner in working asphalt pavement dates back to a patent issued in 1905 to one Morcom, United States Patent No. 799,014. The value of such a heater lies in the fact that it softens the asphalt without burning the surface. The radiant-heat burner on respondent's claimed invention is essentially the same as that disclosed in a patent issued in 1956 to one Schwank, United States Patent No. 2,775,294. Thus the burner, by itself, is also not patentable.

The placement of the radiant-heat burner upon the side of a standard bituminous paver is the central feature of respondent's patent. The heater is used in this way for continuous paving along a strip to prevent a cold joint, whereas previously radiant-heat burners had

been used merely for patching limited areas of asphalt. The operation of the heater is, however, in no way dependent on the operation of the other equipment on the paving machine. It is hung on the paver merely because that is a convenient place for it when heating the longitudinal joint of the pavement. A separate heater can also be used in conjunction with a standard paving machine to eliminate the cold joint, and in fact is so used for heating the transverse joints of the pavement.

Respondent claims that its patent involves a combination of prior art which produces the new and useful result of eliminating the cold joint. Its claim of unobviousness is based largely on the testimony of two individuals who are knowledgeable in the field of asphalt paving, expressing their doubts to the inventor Neville that radiant heat would solve the problem of cold joints. The District Court rejected respondent's claim of infringement, finding the patent invalid. The Court of Appeals, by a divided vote, reversed. For reasons that follow, we reverse the judgment of the Court of Appeals.

Each of the elements combined in the patent was known in the prior art. It is urged that the distinctive feature of the patent was the element of a radiant-heat burner. But it seems to be conceded that the burner, by itself, was not patentable. And so we reach the question whether the combination of the old elements created a valid combination patent.

The District Court said: "All that plaintiff [respondent] has done is to construct four elements known in the prior art on one chassis." That is relevant to commercial success, not to invention. The experts tendered by respondent testified that they had been doubtful that radiant heat would solve the problem of

the cold joint.[1] But radiant heat was old in the art. The question of invention must turn on whether the combination supplied the key requirement. We conclude that the combination was reasonably obvious to one with ordinary skill in the art.

There is uncontested evidence that the presence of the radiant-heat burner in the same machine with the other elements is not critical or essential to the functioning of the radiant-heat burner in curing the problem of the cold joint. For it appears that a radiant-heat burner operating in a tandem fashion would work as well. The combination of putting the burner together with the other elements in one machine, though perhaps a matter of great convenience, did not produce a "new or different function," *Lincoln Co.* v. *Stewart-Warner Corp.*, 303 U. S. 545, 549, within the test of validity of combination patents.

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[1] Mr. Francis C. Witkoski, an engineer, met the inventor, Charles Neville, between 1955 and 1960 while Witkoski was Director of Research for the Pennsylvania Department of Highways. Neville told Witkoski that he had invented a piece of equipment that would heat but not burn asphalt, and would thus eliminate cold joints. Witkoski replied that he did not believe that Neville had such a piece of equipment. Subsequently, Witkoski ordered from Neville some of the separate burner units and tested them. Thus the dialogue between Witkoski and Neville focused exclusively on the properties of the radiant-heat burner.

Mr. Leslie B. Crowley, also an engineer, met Neville prior to 1954. Crowley was at that time the Chief of the Pavements and Railroads Section, Director of Installations, Headquarters, United States Air Force. Neville explained the advantages of using an "infra-red" heater for the maintenance and repair of asphalt pavements. Crowley testified that his interest was insufficient at that time to motivate him to take any action with regard to the device because he did not believe it would "do the job." Thus the Crowley-Neville discussion also focused entirely on the radiant-heat burner, and not on the combination of the burner with the other elements of a bituminous paver.

A combination of elements may result in an effect greater than the sum of the several effects taken separately. No such synergistic result is argued here. It is, however, fervently argued that the combination filled a long felt want and has enjoyed commercial success. But those matters "without invention will not make patentability." *A. & P. Tea Co.* v. *Supermarket Corp.*, 340 U. S. 147, 153.

The patent standard is basically constitutional, Article I, § 8, of the Constitution authorizing Congress "[t]o promote the Progress of . . . useful Arts" by allowing inventors monopolies for limited times. We stated in *Graham* v. *John Deere Co.*, 383 U. S. 1, 6, that under that power Congress may not "enlarge the patent monopoly without regard to the innovation, advancement or social benefit gained thereby. Moreover, Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available. Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a patent system which by constitutional command must 'promote the Progress of . . . useful Arts.' This is the *standard* expressed in the Constitution and it may not be ignored."

In this case the question of patentability of the combination turns on the meaning of 35 U. S. C. § 103 [2] which

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[2] 35 U. S. C. § 103 provides:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made."

the Court reviewed in the *Graham* case, *supra,* at 13–17. We said:

> "We believe that this legislative history, as well as other sources, shows that the revision was not intended by Congress to change the general level of patentable invention. We conclude that the section was intended merely as a codification of judicial precedents embracing the *Hotchkiss* [3] condition, with congressional directions that inquiries into the obviousness of the subject matter sought to be patented are a prerequisite to patentability." *Id.,* at 17.

Obviousness, as an issue, is resolved as follows:

> "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved." *Ibid.*

We admonished that "strict observance" of those requirements is necessary. *Id.,* at 18.

We conclude that while the combination of old elements performed a useful function,[4] it added nothing to the nature and quality of the radiant-heat burner already patented. We conclude further that to those skilled in the art the use of the old elements in com-

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[3] *Hotchkiss* v. *Greenwood,* 11 How. 248.

[4] 35 U. S. C. § 101 provides:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

Absent here is the element "new." For as we have said, the combination patent added nothing to the inherent characteristics or function of the radiant-heat burner.

bination was not an invention by the obvious-nonobvious standard. Use of the radiant-heat burner in this important field marked a successful venture. But as noted, more than that is needed for invention.

Reversed.

THE CHIEF JUSTICE took no part in the decision of this case.