

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT E. STEELE,
MICHAEL A. ROMANO,
DONALD C. WARREN
and ALFREDO ANDRENACCI

Appeal No. 95-0942
Application 07/877,772¹

HEARD: July 14, 1997

Before STONER, *Chief Administrative Patent Judge*, and ABRAMS and FRANKFORT, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Application for patent filed May 4, 1992.

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This is an appeal from the decision of the examiner finally rejecting claims 1 through 16, which constitute all of the claims of record in the application.

The appellants' invention is directed to a method for covering a pipeline. The subject matter before us on appeal is illustrated by reference to claim 1, which reads as follows:

1. A method for covering a pipeline comprising:

(a) wrapping the pipeline with a continuous polymeric wrapping sheet having a heat-softenable adhesive on the side applied to the pipeline;

(b) applying a stress to the wrapping sheet and so as to generate a stress having at least a component extending circumferentially of the pipeline, so that the sheet together with the adhesive grips the exterior of the pipeline in tight conformity thereto; and

(c) exposing the wrapped pipeline to electromagnetic induction heating at a frequency and an intensity and for a period sufficient to heat the outer skin of the pipeline transiently and soften the adhesive sufficiently to cause the adhesive to wet and bond to the exterior of the pipeline.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Straughan	3,223,571	Dec. 14, 1965
Lindsey	4,008,114	Feb. 15, 1977
Tailor et al. (Tailor)	4,472,468	Sep. 18, 1984
Koopman	4,728,532	Mar. 1, 1988

THE REJECTIONS

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Claims 1 through 4 and 10 through 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Tailor in view of Lindsey and Koopman.

Claims 5 through 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Tailor in view of Lindsey, Koopman and Straughan.

The rejections are explained in the Examiner's Answer.

The opposing viewpoints of the appellants are set forth in the Brief.

OPINION

The examiner has rejected independent claim 1 as being unpatentable over the teachings of Tailor taken in view of those of Lindsey and Koopman. The examiner finds in Tailor all of the subject matter recited in claim 1 except for the form of the covering (continuous wrapping), the manner of wrapping the covering (applying a stress), and the method for heating the cover (induction). After pointing out that Lindsey discloses wrapping a pipe with a continuous wrap and Koopman teaches curing the resin in the wrap by inductively heating the pipe upon which it is wrapped, the examiner concludes that it would have been obvious to one of ordinary skill in the art to so modify the system of Tailor. According to the examiner, the first

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modification is suggested by Lindsey "in order to properly affix the tape and ensure a firm seal against the pipe," and the second would have been "obvious for one of average skill in the art" from Koopman (Answer, page 4).

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

Like the appellants, our quarrel with the examiner's position begins with the primary reference, Tailor. Basic to the Tailor invention is the use of a plurality of cover sheets which

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are individually wrapped about the pipe, rather than the continuous wrapping required by the appellants' claim 1 and disclosed in Lindsey and Koopman. In fact, it is the objective of the Tailor invention to improve upon the type of pipe covering in which

individual sheets are used by eliminating the weakness in the joining of the length-wise seams (column 1, line 38 *et seq.*), which are not present in a continuously wrapped system. Moreover, there is no teaching in Tailor of stressing the individual sheets as they are wrapped around the pipe; each sheet is stretched longitudinally to make it heat unstable (column 2, line 5 *et seq.*), which is necessary since the tightness about the pipe is achieved by heat-shrinking the unstable sheet as the final step of the process (column 2, lines 22 and 23).

Lindsey discloses a pipe wrapped with a continuous sheet, which is placed under tension during application. No adhesive is utilized, nor is there any additional treatment of the sheet subsequent to the mechanical act of wrapping. After acknowledging that a certain amount of tension must be applied as the continuous sheet is wrapped, Lindsey goes on to state that

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the problem solved by his invention is controlling the tension placed upon the wrapping sheet as the wrapping apparatus moves about the pipe (column 1).

Koopman is directed to discrete sections of pipe, which can be held in a fixture (see drawing). In the Koopman system, at room temperature an entire section of pipe is covered with a continuous wrap impregnated with resin, subsequent to which induction heating is applied to the pipe section in a number of back and forth passes until the resin is caused to flow. A second induction heating step then cures the resin. See column 2, line 54 *et seq.*, and claim 1.

The mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). We fail to perceive any teaching, suggestion or incentive in the references which would have led one of ordinary skill in the art to modify Tailor in the manner proposed by the examiner. First of all, to substitute for Tailor's individual sheet wrapping system the continuous wrapping system disclosed by Lindsey amounts not to a modification of Tailor, but to a discarding of the Tailor invention in its entirety. Second, Koopman does not teach

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applying inductive heating "transiently," that is, as the wrapping progresses, to wet and bond the adhesive to the pipe, as is required by the appellants' claim 1. From our perspective, the examiner has engaged in an exercise of picking and choosing features that were individually known in the prior art, and has combined them by means of the hindsight accorded one who previously viewed the appellants' disclosure. This of course, is impermissible. See *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

The shortcomings in the rejection of independent claim 1 are not overcome by considering the teachings of Straughan, which additionally was applied against some of the dependent claims.

The combined teachings of the references applied by the examiner fail to establish a *prima facie* case of obviousness with regard to the subject matter of independent claim 1, and we therefore will not sustain the rejection of this claim. It follows, of course, that the rejections of the other claims, all of which depend from claim 1, also cannot be sustained.

Neither of the rejections is sustained.

The decision of the examiner is reversed.

REVERSED

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