

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KRISHNA SRINIVASAN and BRIAN E. DUFFY

Appeal No. 2002-0174
Application No. 09/190,373

ON BRIEF

Before GARRIS, WARREN and KRATZ, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 1, 5-9 and 11. The appeal as to claim 2 was withdrawn by appellants (brief, page 2). No other claims remain pending in this application.

Appellants' invention relates to a welding apparatus for joining roofing elements. The apparatus includes a pressure roller and a blower having a nozzle with a particular tripartite outlet construction. An understanding of the invention can be derived from a reading of claim 1, the sole independent claim on appeal. Claim 1 is reproduced below:

1. A pressure roller in combination with a heating element for a welding apparatus for running longitudinally along an area of overlapment between an underlying first thermoplastic sheet having an upper surface and being supported by a deck of a roof structure, said first thermoplastic sheet being secured to said deck by a line of fastening means adjacent to and parallel with an edge thereof, and an overlapping second thermoplastic sheet having a lower surface which is disposed over said line of fastening means and in an overlapping registry with a portion of said first thermoplastic sheet, said pressure roller being made of stainless steel and being integral with a stainless steel axle designed to be connected to a driving means at one end thereof and comprising at the other end of said axle: a distal end, a proximal end and a center portion which defines a groove between the distal proximal ends, said groove carrying an elastomeric cushion designed to ride over said line of fastening means said elastomeric cushion selected from the group consisting of;

- natural rubber;
- acrylate-butadiene rubber;
- cis-polybutadiene;
- chlorobutyl rubber;
- chlorinated polyethylene elastomers;
- polyalkylene oxide polymers;
- ethylene vinyl acetate;
- hexafluoropropylene-vinylidene fluoride-tetrafluoroethylene terpolymers;
- butyl rubbers;
- polyisobutene;
- synthetic polyisoprene rubber;
- styrene-butadiene rubbers;
- tetrafluoroethylene propylene copolymers; and
- thermoplastic-copolyesters,

said elastomeric cushion having a durometer from 41 to 80 Shore A;

said heating element positioned between the upper surface of said first thermoplastic sheet and the lower surface of said second thermoplastic sheet and above said line of fastening means having a blower therein and a nozzle having an outlet therein with three portions, two of which are large openings to allow delivery of the major portion of heated air produced by

the heating element, and a restricted portion therebetween which allows delivery of sufficient amount of the heated air to soften the overlapping portions of said thermoplastic sheets under and over said fastening means, wherein said nozzle having said outlet with three portions therein being permanently set without allowing variations in the selective distribution of heated air over the overlapping portions of said thermoplastic sheets;

wherein as said welding apparatus is advanced longitudinally along the overlapping portions of said thermoplastic sheets while being heated by said heating element softens to plasticity the upper surface of said first thermoplastic sheet and the lower surface of said second thermoplastic sheet and said pressure roller produces a weld on both sides of said line of fastening means.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Murphy	4,834,828	May 30, 1989
Chitjian	4,855,004	Aug. 08, 1989
Hubbard et al. (Hubbard)	5,935,357	Aug. 10, 1999
		(filed Feb. 20, 1997)

Claims 1, 5-9 and 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Murphy in view of Chitjian and Hubbard.

We refer to appellants' brief and the answer for a complete exposition of the opposing viewpoints of appellants and the examiner concerning the rejection before us.

Upon careful review of the entire record including the respective positions advanced by appellants and the examiner, we

find ourselves in agreement with appellants since the examiner has failed to carry the burden of establishing a prima facie case of obviousness. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1471-1472, 223 USPQ 785, 787-788 (Fed. Cir. 1984). Accordingly, we will not sustain the examiner's stated rejection.

In a rejection under 35 U.S.C. § 103, it is fundamental that all elements recited in a claim must be considered and given effect in judging the patentability of that claim against the prior art. See In re Geerdes, 491 F.2d 1260, 1262-63, 180 USPQ 789, 791 (CCPA 1974). Thus, a prima facie case of obviousness is established by showing that some objective teachings or suggestions in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention, including each and every limitation of the claims, without recourse to the teachings in appellants' disclosure. See generally In re Oetiker, 977 F.2d 1443 at 1447-48, 24 USPQ2d 1443 at 1446-47. The prior art as applied must be such that it would have provided one of ordinary skill in the art with both a suggestion to carry out appellants' claimed invention and a reasonable expectation of success in doing so. See In re Dow Chemical Co., 837 F.2d 469,

473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *Id.*

Here, we agree with appellants (brief, pages 5 and 6) that the combination of the teachings of the applied references would not have led one of ordinary skill in the art to either the particular pressure roller construction or tripartite nozzle outlet as here claimed as part of a welding apparatus. The examiner has not shown where Hubbard describes a pressure roller construction with a groove between distal and proximal ends thereof, which groove carries an elastomeric cushion as claimed that would have been suggested as an obvious substitute for the weld wheel (36, figure 3) of Murphy. Rather, Hubbard, describes a single weld wheel (numeral 63, figure 7 and column 7, lines 29-42), which weld wheel is made of durometer material having a soft middle portion and hard outer portion. Also, Chitjian describes a steel wheel (18, figures 1 and 4) that does not apparently include a groove and which wheel may be covered with an outer cover of heat resistant silicone rubber (column 3, lines 45-48). The examiner has not established how the combined teachings of Murphy, Hubbard and Chitjian would have reasonably suggested making a weld wheel as here claimed from isolated pieces of each

of the disparate wheels of those references. Also, the examiner has not substantiated how the teachings of Hubbard (column 6, lines 32-50 and figures 9-18) with respect to single and dual nozzle outlet designs taken together with the teachings of Murphy (paragraph bridging columns 3 and 4) with respect to a bifurcated nozzle would have reasonably directed one of ordinary skill in the art toward fashioning a nozzle outlet with three portions as here claimed.

Our reviewing court has repeatedly cautioned against employing hindsight by using the appellants' disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., Grain Processing Corp. v. American Maize-Products Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988). From our perspective, the examiner's rejection appears to be premised on impermissible hindsight reasoning. On the record of this appeal, it is our view that the examiner has not carried the burden of establishing a prima facie case of obviousness with respect to the subject matter defined by the appealed claims.

CONCLUSION

The decision of the examiner to reject claims 1, 5-9 and 11 under 35 U.S.C. § 103 as being unpatentable over Murphy in view of Chitjian and Hubbard is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES F. WARREN)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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PETER F. KRATZ)	
Administrative Patent Judge)	

PFK/sld

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APPEAL NO. - JUDGE KRATZ
APPLICATION NO.

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DECISION: **ED**

Prepared By:

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FINAL TYPED: