

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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 STEVEN L. GOODMAN and ROBERT E. ~~VOGE~~

Appeal No. 94-3620
Application 07/990,824¹

ON BRIEF

MAILED

JUL 23 1996

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before KIMLIN, LYDDANE and GARRIS, *Administrative Patent Judges*.
LYDDANE, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 37 and 39 through 41. Claim 38, which is the only other

¹ Application for patent filed December 11, 1992. According to appellants, the application is a continuation of Application 07/679,713, filed April 4, 1991, which is a continuation of Application 07/382,448, filed July 18, 1989, now abandoned, which is a continuation of Application 07/145,781, filed January 19, 1988, now abandoned.

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claim pending in the application, stands objected to as containing allowable subject matter but depending from a rejected claim.

The subject matter on appeal is directed to an ultrasonic bonding apparatus. Claims 37 and 39 are exemplary of the invention and a copy thereof, as they appear in the appendix to the appellants' brief, has been appended to this decision.

The references of record relied upon by the examiner in rejections of the claims under 35 USC 103 are:

Carpenter	3,575,752	Apr. 20, 1971
Rooney	4,022,366	May 10, 1977
Wang et al. (Wang)	4,419,160	Dec. 06, 1983
Craig	4,701,239	Oct. 20, 1987

Claim 37 stands rejected under 35 USC 103 as being unpatentable over Carpenter in view of Rooney.

Claim 39 stands rejected under 35 USC 103 as being unpatentable over Carpenter in view of Rooney and Wang.

Claims 40 and 41 stand rejected under 35 USC 103 as being unpatentable over Carpenter in view of Rooney, Wang and Craig.

Rather than reiterate the examiner's statement of the above rejections and the conflicting viewpoints advanced by the examiner and the appellants, we refer to pages 3 through 10 of the examiner's answer, to pages 4 through 11 of the appellants'

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brief and to the appellants' reply brief for the full exposition thereof.

OPINION

In arriving at our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art, and to the respective positions advanced by the appellants and by the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to all claims on appeal. Our reasoning for this determination follows.

Initially, we note that we are in substantial agreement with the examiner's position that the ultrasonic bonding apparatus disclosed in the patent to Carpenter includes an ultrasonic horn and an endless belt of metallic screen 24 driven by a drive drum 22. Contrary to the appellants' arguments, the endless belt forms a continuously moving anvil, despite the presence of the anvil 15, in the same manner that the wire mesh belt of appellants' device is supported by the fixed support bars 34, 36, 38, 40 as disclosed in lines 7 through 15 on page 8 of appellants' specification and in Figure 1 of appellants' drawings. Moreover, contrary to the appellants' arguments, the

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bonding apparatus of Carpenter is directed to bonding of two continuously moving webs (note column 1, line 70 through column 2, line 2). However, as noted by both the examiner and the appellants, the ultrasonic bonding apparatus of Carpenter does not include a

means for providing vacuum suction directly below said bonding area, whereby puckering and tearing of said two continuously moving webs at the bonding area are prevented

as required by both of independent claims 37 and 39.

The examiner has relied upon the teachings of the patent to Rooney to supply this deficiency of Carpenter. In particular, the examiner contends that Rooney discloses a sheet handling apparatus, having an endless belt 29 of air-pervious material, and a vacuum manifold, including a chest 41, holes 43 and a vacuum pump, is positioned below the belt to apply a vacuum force through the air-pervious belt to hold the sheet in position against the belt. The examiner reasons that

[o]ne having ordinary skill in the art would recognize [sic, would have recognized] the advantage of Rooney's vacuum manifold to provide better positional control of the web materials. For this reason it would have been obvious to incorporate Rooney's vacuum manifold in the device disclosed by Carpenter [paragraph spanning pages 4 and 5 of the answer].

We disagree with the examiner's proposed combination of the teachings of Carpenter and Rooney substantially for the reasons

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set forth by the appellants' in the brief and reply brief. First, the device disclosed in Rooney is directed to the transport of a lead strip of paper web from a dryer 10 to the calendars 12 (note Figure 1). While the chest 41, holes 43 and the vacuum pump connected thereto do cooperate with the air-pervious belt 29 to hold the web on the belt in a conveying system, we find nothing in the teachings of Rooney suggestive of the use of such a vacuum positioning device in a bonding apparatus where a plurality of webs are to be retained in position by the vacuum means in the bonding area to aid in preventing puckering and tearing of the web as claimed by appellants. We also find nothing to suggest that, or even how, the "massive rigid anvil 15" of Carpenter would be replaced by the chest 41, with holes 43, of Rooney to arrive at appellants' claimed bonding apparatus.

As stated in W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984),

[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

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It is our conclusion that the only reason to combine the teachings of Carpenter and Rooney in the manner proposed by the examiner results from a review of appellants' disclosure and the application of impermissible hindsight. Thus, we cannot sustain the examiner's rejections of appealed claim 37 under 35 USC 103.

We have also considered the additional teachings of Wang and Craig as applied in the rejections of claims 39 and 40-41, respectively, but we find nothing therein to suggest modification of the patent to Carpenter to include a means for providing vacuum suction as recited in appealed claim 39 or to otherwise overcome the deficiencies of Carpenter. Therefore, we also cannot sustain the examiner's rejection of claim 39, or of claims 40 and 41 dependent thereon, under 35 USC 103.

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Accordingly, the decision of the examiner rejecting claims
37 and 39 through 41 under 35 USC 103 is reversed.

REVERSED

Edward C. Kimlin)
EDWARD C. KIMLIN)
Administrative Patent Judge)

William E. Lyddane) BOARD OF PATENT
WILLIAM E. LYDDANE)
Administrative Patent Judge) APPEALS AND

Bradley R. Garris) INTERFERENCES
BRADLEY R. GARRIS)
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APPENDIX

37. An ultrasonic bonding apparatus for ultrasonically bonding at least two continuously moving webs together, said apparatus comprising:

an ultrasonic horn means for transmitting ultrasonic energy, said horn means having a face;

a continuously moving anvil means underlying said horn means for perfecting bonding between said two continuously moving webs, said anvil means comprising a continuously moving, air-permeable, endless wire mesh defining a plurality of pronounced upwardly-projecting knuckles;

a bonding area of said wire mesh directly below said face of said horn means; and

means for providing vacuum suction directly below said bonding area, whereby puckering and tearing of said two continuously moving webs at the bonding area are prevented.

39. An ultrasonic bonding apparatus for ultrasonically bonding at least two continuously moving webs together, said apparatus comprising:

an ultrasonic horn means for transmitting ultrasonic energy, said horn means having a face;

a continuously moving anvil means for perfecting bonding between said two continuously moving webs, said anvil means comprising a continuously moving, rotatable drum having a plurality of projections extending radially outwardly therefrom;

a bonding area directly below said face of said horn means; and

means for providing vacuum suction directly below said bonding area, whereby puckering and tearing of said two continuously moving webs at the bonding area are prevented.