

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT J. REIS and HAROLD M. BUETTNER

Appeal No. 2001-1888
Application No. 08/741,449

ON BRIEF

Before BARRETT, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.
BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-20, which are all the claims in the application.

We reverse.

BACKGROUND

The invention relates to method and apparatus for providing electrical connection in a fixture for testing printed circuit boards. Claim 13 is reproduced below.

13. A spring probe receptacle contact structure, comprising:

a spring probe receptacle adapted to receive a spring probe within an internal cavity through an opening at one end and having a compliant pin fitted within and protruding from an opening in at [sic] an opposite end.

The examiner relies on the following reference:

Welsh et al. (Welsh)	5,411,418	May 2, 1995
----------------------	-----------	-------------

Claims 1-20 stand rejected under 35 U.S.C. § 102 as being anticipated by Welsh.

We refer to the Final Rejection (Paper No. 13) and the Examiner's Answer (Paper No. 22) for a statement of the examiner's position and to the Brief (Paper No. 21) for appellants' position with respect to the claims which stand rejected.

OPINION

At the outset, we note that the Final Rejection sets forth four different grounds of rejection against the claims. Of those rejections, claims 1-12 and 17 were rejected under 35 U.S.C. § 102 as being anticipated by Welsh, and claims 13-16 and 18-20 were rejected under 35 U.S.C. § 103 over the same reference. Although the Answer contends that the Brief's "statement of the issues" that lists the four grounds of rejection is correct, the Answer does not repeat the rejections not relying on Welsh, and asserts

Appeal No. 2001-1888
Application No. 08/741,449

that claims 1-20 are anticipated by Welsh. Additionally we note that only Welsh is addressed in the Answer's "Response to Argument" section.

In view of the foregoing, we conclude that earlier rejections have been withdrawn, and that the basis for the rejection of claims 13-16 and 18-20 over Welsh has shifted from obviousness to anticipation. The sole rejection for our review is that applied against all the claims as being anticipated by Welsh. See Ex parte Emm, 118 USPQ 180, 181 (Bd. App. 1957) (rejection not referred to in the examiner's answer is assumed to have been withdrawn).

The statement of rejection against claims 1-20 (Answer at 3) points to structures in Welsh that are deemed to correspond to the requirements of the claims. Appellants argue (Brief at 9-10) that Welsh fails to disclose spring probes or spring probe receptacles. Appellants contend that the recitations are terms of art that must be interpreted in accordance with their ordinary meanings. Appellants further refer to several U.S. patents and allege that those disclosures support appellants' position.

The examiner does not address appellants' reliance on the U.S. patents. However, the examiner responds that "connector passage" 18 of Welsh "is equivalent to the receptacle and this receptacle is clearly shown in figure # 6." (Answer at 4.) Figure 6 of Welsh, however, does not show a "receptacle," but an electrical contact. In any event, the examiner's position may be based on the view expressed in the Final Rejection, and quoted by appellants at page 9 of the Brief, that the term "spring probe receptacle" is not given any patentable weight and is read as "any receptacle."

Appeal No. 2001-1888
Application No. 08/741,449

“Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention.” RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). The first inquiry must be into exactly what the claims define. In re Wilder, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). The terms used in the claims bear a “heavy presumption” that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art. Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002).

We have reviewed the U.S. patents referenced by appellants and we agree that “spring probe” and “spring probe receptacle” are apparent terms of art, and their recognized meanings cannot be disregarded. As shown in the drawings of U.S. patent 5,744,977 (“Cuautla”) and U.S. patent 5,801,544 (“Swart”), a “spring probe” requires at least a spring and a plunger of some form for making electrical contact. Conventional spring-loaded contact probes generally include an outer receptacle, a movable plunger, a barrel containing the plunger, and a spring for biasing travel of the plunger in the barrel. Conventionally, the barrel is mounted within the receptacle with the plunger extending outwardly from the receptacle. See Swartz, col. 1, ll. 13-29. Spring probe components comprised of a barrel, plunger, and spring are commonly inserted into an outer receptacle for retaining the probe in a fixture. See id. at col. 1, l. 54 - col. 2, l. 5.

Welsh discloses an assembly including contacts 26 (Fig. 4) which may be inserted into a PC board and then contained within respective insulator passages 18 in connector insulator 16. Col. 3, l. 65 - col. 4, l. 7. As shown in Figure 2, contact 26 within passage 18 includes a forward mating portion (pin) 44, a cylindrical rear portion 42, a compliant part 32 in an interference fit within hole 24 of circuit board 14, and a rear end part 36 for connection to a wire or like (e.g, for wire wrapping). Pin 44 mates with socket contact 46 in “mating connector device 50.” Col. 2, l. 28 - col. 3, l. 5.

Instant method claim 1 requires fitting a spring probe receptacle for a spring probe with a compliant pin. In view of the evidence of the artisan’s understanding of the term “spring probe receptacle,” we cannot agree with the examiner that passage 18 of the reference may properly be deemed a spring probe receptacle. Welsh does not disclose a spring probe, and we have no evidence that the artisan would regard the passage within which contact 26 resides as a receptacle for a spring probe.

Instant apparatus claim 9 requires at least one spring probe receptacle having a compliant pin at one end. For the reason that, in our view, the artisan would not regard passage 18 to be a spring probe receptacle, passage 18 does not anticipate the claimed spring probe receptacle, under proper interpretation of the claim.

Instant subcombination claim 13 is broader than claim 1 or 9 in the respect that the spring probe receptacle is “adapted to receive” a spring probe within an internal cavity through an opening at one end and has a compliant pin fitted within and protruding from an opening in (or “at”) an opposite end. Assuming, arguendo, that

Appeal No. 2001-1888
Application No. 08/741,449

compliant pin 32 of Welsh is “fitted within” and protrudes from an opening in passage 18 (Fig. 2), we do not see how the remainder of the claim may be met by the reference.

The recitation regarding “adapted to receive” a spring probe, in isolation, might require no more than a space (e.g, a cylindrical opening) suitable to receive a spring probe. However, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). As shown in Figure 2 of Welsh, when the compliant pin of contact 26 protrudes from an opening of passage 18, the remainder of the contact fills substantially all of passage 18. Finding that passage 18 is “adapted to receive” a spring probe at one end while the compliant pin protrudes from the passage at an opposite end would be based on speculation, at best.

We are thus persuaded by appellants that Welsh fails to disclose each and every element of the claimed invention respectively set forth by independent claims 1, 9, and 13. Accordingly, we do not sustain the rejection of claims 1-20 under 35 U.S.C. § 102 as being anticipated by Welsh.

Appeal No. 2001-1888
Application No. 08/741,449

CONCLUSION

The rejection of claims 1-20 under 35 U.S.C. § 102 as being anticipated by
Welsh is reversed.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
HOWARD B. BLANKENSHIP)	
Administrative Patent Judge)	

Appeal No. 2001-1888
Application No. 08/741,449

BRACEWELL & PATTERSON, L.L.P.
P.O. BOX 969
AUSTIN , TX 78767-0969