

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN E. CRONIN, JOHN A. HILTEBEITEL,
CARTER W. KAANTA, and JAMES G. RYAN

Appeal No. 2000-1402
Application No. 08/755,052

ON BRIEF

Before KRASS, RUGGIERO, and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of

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providing cross-over and contact capabilities.

Representative independent claim 1 is reproduced as follows:

1. A wiring structure comprising:

a first planar wire in a first planar metallization layer, wherein the first planar wire has a first leg and a second leg spaced apart by an insulative material;

a second planar wire in a second planar metallization layer, wherein the second planar metallization layer is in direct contact with the first planar metallization layer, and wherein the second planar wire crosses the insulating material and is electrically insulated from the first and second legs of the first planar wire; and

a connection stud in a contact layer wherein the first and second legs of the first planar wire are in electrical connection with the connection stud.

The examiner relies on the following references:

Pritchard Jr. et al. (Pritchard Jr.)	3,366,519	Jan. 30, 1968
Stolmeijer	5,834,845	Nov. 10, 1998
		(filed Sept. 21, 1995)

Claims 1, 2, 5 and 7 stand rejected under 35 U.S.C. 102(b) as anticipated by Pritchard. Claims 1, 2, 4, 5, 11 and 12 stand rejected under 35 U.S.C. 102(e) as anticipated by Stolmeijer.

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positions of appellants and the examiner.

OPINION

At the outset, we note that, in accordance with the grouping of the claims at page 4 of the brief, all claims are to stand or fall together. However, appellants argue the limitations of various claims. Accordingly, we will focus our attention primarily on independent claim 1 but will also respond to appellants' comments regarding other claims specifically argued.

With regard to claims 1, 2, 5 and 7, the examiner contends that the subject matter of these claims is anticipated by Pritchard, pointing to Figure 2 of Pritchard. Specifically, the examiner points to Pritchard's Pb conductor strips 40 and 42, separated by insulative layer 70, as corresponding to the claimed first and second legs of a planar wire. The examiner identifies neck portion 50 as corresponding to the claimed second planar

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electrical connection with the first and second legs 40 and 42.

The examiner's rationale appears reasonable to us.

For their part, appellants argue only that Pritchard does not disclose or suggest "planar" metallization layers, calling the layers and wires in Figure 2 of Pritchard "non-planar" [brief-page 5]. However, appellants do not explain why the layers and wires in Pritchard are not "planar," as claimed. The examiner points to Pritchard as showing metal strips and metal films "which have a planar shape" [answer-page 5]; the strips and films appear to be planar; we find nothing within Pritchard to indicate that such strips and films are not planar; and appellants offer no explanation as to why these strips and layers are not to be considered planar. Accordingly, we do not find appellants' argument in this regard to be persuasive.

Although appellants group the claims as standing or falling together, appellants argue the specifics of claim 5, arguing that

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film 64.

We agree with the examiner that the claim does not require the contact layer to be formed "directly on" the substrate. The fact that there are intervening layers 62 and 64 between the substrate and the gate strip 46 does not negate the broad, yet reasonable, interpretation of gate strip 46 being "on a surface of a substrate," as claimed.

Since appellants offer no other arguments against the examiner's rejection of claims 1, 2, 5 and 7 under 35 U.S.C. 102(b) over Pritchard, we will sustain this rejection.

With regard to claims 1, 2, 4, 5, 11 and 12, the examiner points to Figure 3 of Stolmeijer as disclosing each and every claimed limitation.

While appellants' argument is not entirely clear, they appear to be arguing that Stolmeijer does not disclose the claimed first and second legs of a first planar wire because the component of the reference relied on by the examiner for disclosing the "second leg" is "merely a metal plug...for

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wire in a first planar metallization layer, is metal. With regard to Stolmeijer showing a "plug," as the examiner points out, column 4, lines 11-20, of Stolmeijer makes it clear that whereas the prior art to Stolmeijer used "plugs," Stolmeijer replaces these plugs with patterned metal layers. Thus, Figure 3 of Stolmeijer is depicting patterned metal layers, not "plugs," as asserted by appellants. Accordingly, for whatever relevance there is in the use of patterned metal layers rather than plugs, Stolmeijer is not depicting plugs. In any event, appellants offer no explanation as to why, even if Stolmeijer shows a plug, the instant claimed "leg" distinguishes over such a "plug."

Since appellants make no other arguments regarding claims 1, 2, 4, 11 and 12, and fails to point to any distinction between Stolmeijer's disclosure and the instant claimed subject matter, we will sustain the rejection of claims 1, 2, 4, 11 and 12 under 35 U.S.C. 102(e).

With regard to claim 5, appellants argue that Stolmeijer does not disclose the claimed connection stud in a contact layer

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substrate 12 nor formed on a substrate that serves as an isolation area. Appellants point out that the layer below layer 36a does not function as an isolation area and that metal layer 36a is electrically coupled to metal layer 32 formed in that layer [brief-page 6].

With regard to the metal layer 36a, it clearly is formed on the surface of the substrate 12. As explained supra, the claim does not require that the contact layer be formed *directly* on the surface. Layer 36a is formed on the surface of substrate 12 via layers 32, and doped region 10. Further, substrate 12 does, indeed, serve as "an isolation area," as broadly claimed, because of its insulative properties.

Accordingly, having responded to all of appellants' arguments regarding claim 5, we also will sustain the rejection of this claim under 35 U.S.C. 102(e) over Stolmeijer.

Finally, we turn to the rejection of claims 3, 7-9 and 13-15 under 35 U.S.C. 103.

It is the examiner's position that Stolmeijer teaches the

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the first wire than the second wire and for transmitting electrical current at a lower resistance in the second wire than the first wire to achieve the array required in the art. Further, the claimed method is very commonly known method [sic] to make wiring structure of the sort here involved" [answer-pages 4-5].

We will not sustain the rejection of claims 3, 7-9 and 13-15 under 35 U.S.C. 103 because, in our view, the examiner has not established a prima facie case of obviousness with regard to the instant claimed subject matter.

Claims 3 and 13-15 require a specific configuration regarding transmission of electrical currents at relative capacitances and relative resistances with regard to the first and second planar wires. While the claimed configuration may, indeed, be obvious, within the meaning of 35 U.S.C. 103, the examiner's mere allegation that it is so, without evidence to support such an allegation, will not support a rejection based on 35 U.S.C. 103.

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cannot be the basis for a finding of obviousness within the meaning of 35 U.S.C. 103.

We have sustained the rejection of claims 1, 2, 5 and 7 under 35 U.S.C. 102(b) and we have sustained the rejection of claims 1, 2, 4, 5, 11 and 12 under 35 U.S.C. 102(e) but we have not sustained the rejection of claims 3, 7-9 and 13-15 under 35 U.S.C. 103.

Accordingly, the examiner's decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS)
Administrative Patent Judge)
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