

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. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROSS S. DANDO

Appeal No. 2003-0014
Application No. 08/858,022

ON BRIEF

Before COHEN, ABRAMS, and FRANKFORT, Administrative Patent Judges.
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 66-88, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a method of processing a flexible substrate. An understanding of the invention can be derived from a reading of exemplary claim 66, which has been reproduced below.

The single prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Iwamoto	5,869,150	Feb. 9, 1999
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Claims 66-88 stand rejected under 35 U.S.C. § 103 as being unpatentable over Iwamoto.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the Answer (Paper No. 30) and the final rejection (Paper No. 26) for the examiner's complete reasoning in support of the rejection, and to the Brief (Paper No. 29) and Reply Brief (Paper No. 31) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The appellant's invention is directed to the manufacture of flexible printed wiring, which has been accomplished in the prior art by removably coupling the substrate upon which the conductor will be deposited to a carrier during manufacture. According to the appellant, problems present in the prior art techniques are alleviated by his inventive method. Representative claim 66 sets for the invention in the following manner:

66. A method of processing a flexible substrate comprising:

providing a processing carrier having a silicone-comprising surface;

providing a flexible substrate having a pair of opposing surfaces, the opposing surfaces being a first surface and a second surface;

cleaning the first surface of the flexible substrate;

adhering the first surface of the flexible substrate to the silicone-comprising surface of the processing carrier after the cleaning; and

processing the second surface of the flexible substrate while the first surface of the flexible substrate is adhered with the silicone-comprising surface of the processing carrier.

The standing rejection is that the subject matter of claims 66-88 would have been obvious¹ to one of ordinary skill in the art under 35 U.S.C. § 103 in view of

¹The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, 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 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching,

(continued...)

Iwamoto. It is the examiner's finding that all of the subject matter recited in the claims is disclosed by Iwamoto except (1) cleaning the first surface of the flexible substrate, (2) providing a coupling member with an adhesive layer and a silicone-containing surface, and (3) applying the coupling member to the carrier using a roller. However, the examiner is of the view that one of ordinary skill in the art would have found it obvious to add these features to the Iwamoto system based upon suggestion implicit in the reference (Paper No. 26, pages 2-4). The appellant argues that this is not the case, a conclusion with which we agree. Our reasoning follows.

Iwamoto is directed to the same technology as the appellant's invention. Looking first to claim 66, as the examiner has admitted, Iwamoto does not include the step of cleaning the first surface of the flexible substrate prior to adhering that surface to the processing carrier, as required by this claim. Rather, Iwamoto teaches cleaning the surface of the processing carrier prior to adhering the flexible substrate thereto. However, the examiner takes the position that one of ordinary skill in the art "would have realized that cleaning the first surface of the substrate prior to adhering it to the carrier would provide the same advantage [as cleaning the surface of the processing carrier], and would have found it obvious to do so" (Paper No. 26, sentence bridging

¹(...continued)

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).

pages 2 and 3). We assume, from this statement of the rejection, that the examiner intends to modify the Iwamoto system by cleaning the first surface of the flexible substrate instead of cleaning the surface of the processing carrier. We do not agree with this reasoning.

We first point out that the examiner has failed to provide evidence in support of this proposition, and so it stands merely as the examiner's unsubstantiated opinion. Second, Iwamoto intends to re-use the processing carrier a number of times, and for this reason teaches that it must be cleaned after each use. To eliminate cleaning the processing carrier would adversely impact the operation of the Iwamoto system. Further in this regard, it is significant that Iwamoto never mentions cleaning the surface of the substrate in the specification, although cleaning the surface of the processing carrier is recited several times. There is no basis to assume, as the examiner has done, that cleaning the surface of the substrate "would provide the same advantage" as cleaning the surface of the processing carrier for, in fact, it clearly would not. Thus, suggestion to modify Iwamoto in the manner proposed by the examiner is not present. We further observe that there is no support in the reference for cleaning the surface of the substrate in addition to cleaning the surface of the processing carrier.

It therefore is our opinion that the teachings of Iwamoto fail to establish a prima facie case of obviousness with regard to the subject matter recited in claim 66, and we

will not sustain the rejection of this independent claim or, it follows, of claims 67-71, which depend therefrom.

Independent claims 84 and 85 contain the same limitation regarding cleaning the surface of the flexible substrate, and we also will not sustain the rejection of these claims on the same basis as claim 66. Since claims 86-88 depend from claim 85, the rejection of those claims also is not sustained.

Independent claim 72 includes the steps of providing a processing carrier, providing a coupling member having an adhesive layer and a silicone-comprising surface, first adhering the adhesive layer with the surface of the processing carrier, and then adhering the first surface of a flexible substrate to the silicone-comprising layer of the coupling member. The examiner has admitted that Iwamoto fails to disclose or teach a coupling member with an adhesive layer and a silicon-containing surface, but expresses the view that for one of ordinary skill in the art to modify the Iwamoto method so it was in accordance with the claim would have been "an obvious matter of design choice" since the appellant has not disclosed that the claimed arrangement solves any stated problem "and it appears that both arrangements would perform equally as well" (Paper No. 26, page 3). As the appellant has argued, the examiner sets forth no motivation for making the proposed modification to the Iwamoto method, and therefore the rejection is fatally defective on this basis. Moreover, as the appellant points out, he has asserted in the specification that the claimed method does offer an improvement to

the Iwamoto method, which refutes the examiner's contention on that matter. We also again note that Iwamoto desires to re-use the processing carrier without replacing the adhesive layer, and there is no evidence to support a conclusion that the modification proposed by the examiner would not subvert this objective, which in our view would operate as a disincentive for the artisan to make such a change.

A prima facie case of obviousness is lacking, and the rejection of independent claim 72 and dependent claims 73-78 cannot be sustained.

Independent claim 79 requires, inter alia, that the coupling member be applied to the surface of the processing carrier "using a roller." It is the examiner's position that, although such a teaching is lacking in Iwamoto, it would have been obvious to do so "to ensure uniform bonding of the sticky layer to the carrier," because the reference teaches that it is known to apply sheet-like material to a surface using a roller (Paper No. 26, page 3). We are not persuaded that it would have been obvious to apply one item by means of a roller simply because the reference discloses the application of another item by means of a roller, and we further note that no evidence has been adduced by the examiner in support of this position. Especially when considering the differences in the method disclosed in Iwamoto and that recited in claim 79, we fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to use a roller to apply the coupling member to the surface of the

processing carrier. This being the case, we will not sustain the rejection of claims 79-83.

CONCLUSION

The rejection is not sustained.

The decision of the examiner is reversed.

IRWIN CHARLES COHEN
Administrative Patent Judge

NEAL E. ABRAMS
Administrative Patent Judge

CHARLES E. FRANKFORT
Administrative Patent Judge

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