

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 38

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AKIO UESUGI and TSUTOMU KAKEI

Appeal No. 1998-2800
Application No. 08/572,505

HEARD: April 11, 2001

Before, KIMLIN, KRATZ, and JEFFERY T. SMITH, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 and 2, which are all of the claims pending in this application.

BACKGROUND

Appellants' invention relates to a manufacturing process for a lead-frame forming material. According to appellants (specification, pages 3, 4 and 26), the problems with foreign matter getting between a metal plate and a light sensitive layer are avoided by subjecting a metal web of copper or

copper-nickel alloy continuously to a degrease treatment, an acid cleaning treatment and then a light-sensitive material is coated thereon followed by drying, cutting or winding steps, and the formation of a matting layer on the light-sensitive layer. Exemplary claim 1 is reproduced below.

1. A manufacturing process for producing a lead-free forming material comprising:
 - continuously subjecting a metal web consisting essentially of copper or a copper-nickel alloy to a degrease treatment and an acid cleaning treatment,
 - coating a light-sensitive material on said metal web, followed by drying to form a light-sensitive layer,
 - cutting the resulting coated metal web into fixed lengths along a longitudinal direction or winding the resulting coated metal web into a roll, and forming a matting layer on the light-sensitive material.

In addition to admitted prior art as set forth at page 2, line 6 through page 3, line 16 of appellants' specification, the prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Uesugi et al. (Uesugi)	4,872,946	Oct. 10,
1989		
Fujikawa et al. (Fujikawa)	0,046,047	Feb. 17,
1982		

(Published European Patent Application)

Claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Uesugi in view of the admitted prior art and Fujikawa (Published European Patent Application No. 0,046,047).

OPINION

Upon careful review of the entire record including the respective positions advanced by appellants and the examiner, we find ourselves in agreement with appellants that 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 rejection.

Uesugi is concerned with forming a support for a lithographic printing plate that involves the steps of treating an aluminum or aluminum alloy sheet or web with caustic soda and an acid while induction-heating the web and thereafter a photo-sensitive layer is formed on the support. In addition to aluminum, the alloy may contain a small amount of other metals including copper and nickel (column 2, lines 19-29). Uesugi further suggests that another metal such as zinc or iron may be used in forming the sheet or web as an option (column 2, lines 36-38).

Appellants acknowledge at page 2, line 6 through page 3, line 16 of the specification that a process corresponding to the herein claimed process for forming a lead-frame material is well-known with the notable exceptions that the admitted prior art process uses a plate instead of a web of a copper or copper alloy and performs the degreasing and acid cleaning processing steps via a batch rather than continuous method. Also, the formation of a matting layer as herein claimed is not explicitly mentioned as being part of the admitted prior art being relied upon by the examiner.

Fujikawa (abstract) discloses that the contact of an image bearing film to a polyamide covered plate surface is improved by forming an anti-stickiness layer that has a matted surface on the photo-sensitive polyamide layer of the plate.

The examiner's basic position (answer, pages 4-7) implies that it would have been obvious to one of ordinary skill in the art to modify the process of Uesugi based on the teachings of the admitted prior art and Fujikawa in a manner so as to arrive at appellants' process. The difficulty we have with the position of the examiner stems, at least in part, from the fact that the examiner has not carried the burden of

explaining where the applied prior art suggests to one of ordinary skill in the art a modification of the method of Uesugi. In this regard, Uesugi is concerned with forming an aluminum lithographic printing plate support, the admitted prior art describes a batch process technique for treating copper and copper alloy plates to form a lead-frame and Fujikawa is directed to improving a photo-sensitive polyamide printing plate as outlined above. The examiner simply has not furnished a convincing line of reasoning or otherwise explained why the applied combined teachings of the references would have led one of ordinary skill in the art to modify the process of forming an aluminum lithographic printing plate support as taught by Uesugi based on the specific teachings of those references.

It is significant that the examiner has not fairly addressed appellants' argument that one of ordinary skill in the art would not have been led to use a material such as the copper or copper alloy of the admitted prior art process in the lithographic printing plate support of Uesugi given the alleged differences between the semiconductor pellet fixing lead-frame material that was being addressed by the admitted

prior art and the lithographic printing plate support that was of concern to Uesugi (brief, pages 12-18 and reply brief, pages 1-5). In this regard, we note that the examiner's comment that "both references are concerned with light sensitive coating on metal substrates and that the problems with this process would be a concern to both references" (answer, page 7) is conclusionary. The mere fact that the process of Uesugi may be viewed as being subject to modification to reflect features of the claimed invention does not make such modification obvious unless the examiner has fully explained how the desirability of such modification is particularly suggested by the applied prior art. Here, the explanation of motivation offered in the answer by the examiner is not persuasive since the nature of the proposed modification of Uesugi is not made clear by the examiner and the examiner has not pointed to the specific disclosure in Uesugi and the other applied prior art which particularly suggests the modification of Uesugi that would be necessary to arrive at the claimed process.

For the foregoing reasons, we find that the examiner has not established a prima facie case of obviousness. Because we

reverse on this basis, we need not reach the issue of the sufficiency of the asserted showing of unexpected results (brief, pages 20-24 and reply brief, pages 6 and 7). See In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987).

REMAND

As evident by the above discussion of the admitted prior art set forth in appellants' specification, it is apparent that the herein claimed process primarily differs from that which is expressly admitted to be old by providing that the degrease and acid cleaning steps of the process are carried out in a continuous manner rather than by a batch process. However, it is generally considered to be an obvious option for an ordinarily skilled artisan to modify a process for continuous as opposed to batch operation to obtain the expected advantages of such a change. See In re Korpi, 160 F.2d 564, 566, 73 USPQ 229, 230 (CCPA 1947).

While the herein claimed process also calls for forming a matting layer, we observe that the formation of such a layer is acknowledged by appellants as being described in what appear to be prior Japanese patent publications as set forth

at page 25 of appellants' specification. Also, note at least the Fujikawa reference of record.

The patentability of appellants' claims do not appear to have been fully considered by the examiner with respect to the admitted prior art being utilized as the "primary reference" in light of the above-noted case law which alone may suggest the prima facie obviousness of making the admitted prior art batch process continuous. Of course, the examiner should also consider the admitted prior art together with other references that are of record or otherwise known to the examiner that may likewise suggest such a modification of the admitted prior art method. In addition, the references directed to the formation of a matting layer should be considered together therewith to determine whether the provision of a matting layer forming step as part of the admitted prior art process of making a lead-frame would have been obvious to one of ordinary skill in the art.

Moreover, the secondary evidence of record should be reconsidered by the examiner to determine whether or not that evidence is sufficient to outweigh the evidence of obviousness that may be relied upon by the examiner in contemplating such

a rejection. The examiner should make of record any findings regarding that secondary evidence. In this regard, we remind the examiner that appellants need not compare the claimed subject matter with the proposed modified prior art but rather the closest prior art. However, the evidence furnished by appellants must establish unexpected results that are reasonably commensurate in scope with the claimed process, not merely better results (answer, page 7) that could have been expected.

Accordingly, we remand this application to the examiner for further consideration of the patentability of claims 1 and 2 in light of the above discussion and for clarification of the record with regard to such consideration prior to the final disposition of this application.

CONCLUSION

The examiner's rejection of claims 1 and 2 under 35 U.S.C. § 103 as being unpatentable over Uesugi in view of the admitted prior art and Fujikawa is reversed.

REVERSED AND REMANDED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PETER F. KRATZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JEFFREY T. SMITH)	
Administrative Patent Judge)	

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APPEAL NO. - JUDGE KRATZ
APPLICATION NO.

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DECISION: **ED**

Prepared By:

DRAFT TYPED: 16 Jan 02

FINAL TYPED: