

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(2) is not binding precedent of the Board.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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKESHI MERA,
SATORU ENDO and MITSUHIRO SUGIYAMA

Appeal No. 1996-3052
Application 08/064,639¹

HEARD: October 5, 1999

Before THOMAS, FLEMING and FRAHM, ***Administrative Patent Judges.***

¹ Application for patent filed May 21, 1993.

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FLEMING, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 3 and 4, all of the claims pending in the present application. Claim 2 has been cancelled and claims 5 through 9, which were withdrawn from consideration, have also been cancelled.

The invention relates to a cathode-ray tube. Appellants disclose on page 2 of the specification that figures 16A and 16B show the prior art in which two electrode plates E_1 and E_2 are welded together. Appellants disclose that this arrangement increases manufacturing costs. Appellants disclose on page 5 of the specification that figures 1A and 1B show the present invention in which the electrode is made from a single piece. On page 6 of the specification, Appellants disclose that the electrode plate E made from a one piece structure has two portions. Appellants disclose the steps

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being obliquely formed in the boundary between two portions for the purpose for reducing the gap between the G2 electrode and the G3 electrode in order to improve the focusing performance without deteriorating the breakdown voltage characteristics.

Independent claim 1 is reproduced as follows:

1. A cathode-ray tube which has an electron gun that includes a one piece electrode plate, wherein said one piece

electrode plate has a plurality of beam passage holes and bead supports, a portion having said beam passage holes and a portion having said bead supports are formed as a one piece structure, said two portions have different thicknesses and steps having inclined and continuous walls between said two portions.

The examiner does not rely on any references.

Claims 1, 3 and 4 stand rejected under 35 U.S.C.

§ 103 as being unpatentable over Appellants' admitted prior art.

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Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the briefs² and answer for the respective details thereof.

OPINION

We will not sustain the rejection of claims 1, 3 and 4 under 35 U.S.C. § 103.

The Examiner has failed to set forth a *prima facie* case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the

claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such

² Appellants filed an appeal brief on October 16, 1995. The Examiner mailed a notice of defective brief on December 26, 1995. Appellants filed a corrected appeal brief on January 3, 1996. The corrected brief is the brief that is before us for our consideration and we will simply refer to the corrected brief as the brief. Appellants filed a reply brief on May 30, 1996. The Examiner mailed a communication on June 21, 1996 stating that the reply brief has been entered and considered but no further response by the Examiner is deemed necessary.

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teachings or suggestions. *In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." *Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 519 U.S. 822 (1996) *citing W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

On page 7 of the brief, Appellants argue that the Examiner has failed to show that the prior art figures 16A and 16B teach or suggest a one piece electrode plate as disclosed and claimed. Appellants argue on page 8 of the brief that the one piece electrode plate is structurally and functionally different from the two piece welded plate of the prior art. Appellants further argue on page 8 of the brief that the prior art fails to teach or suggest "steps having inclined and continuous walls being between said two portions" as recited in claim 1.

On page 3 of the answer, the Examiner argues that it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the two portions E_1 and E_2 as shown in figures 16A and 16B as a one piece structure since it has been held that forming in one piece an article that has formerly been formed in two pieces and put together involves only routine skill in the art. On page 4 of the answer, the Examiner further argues that the steps having inclined walls between the two portions as recited in Appellants' claim 1 is not a limitation because it is not necessary. The Examiner argues that such a limitation would be a matter of design alternative.

Appellants argue in the reply brief that the Examiner has failed to evaluate all the limitations recited in Appellants' claims. Appellants point out that claim 1 recites

[a] cathode-ray tube which has an electron gun that includes a one piece electrode plate, wherein said one piece electrode plate has a plurality of beam passage holes and bead supports, a portion having said beam passage holes and a portion having said bead supports are formed as a one piece structure, said two portions have different thicknesses and steps having

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inclined and continuous walls between said
two portions.

Appellants argue that the Examiner has failed to show that the
admitted prior art of figures 16A and 16B suggests or teaches
the

one piece electrode plate having inclined and continuous walls
between said two portions. Appellants argue that the Examiner
cannot ignore these limitations. On pages 3 through 8 of the
reply brief, Appellants show that the one piece electrode
structure provides a greater advantage over the prior art and
that the step having continuous and inclined walls provides
advantages over the prior art as well.

The Federal Circuit states that "[t]he mere fact
that the prior art may be modified in the manner suggested by
the Examiner does not make the modification obvious unless the
prior art suggested the desirability of the modification." ***In
re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84
n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902,
221 USPQ 1125, 1127 (Fed. Cir. 1984).

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We fail to find any of these Examiner's arguments persuasive as to the matter of the prior art leading one of ordinary skill in the art to make the modification proposed by the Examiner. The Federal Circuit held that the totality of the record must be considered and the Board erred by finding a claimed difference a matter of design choice on the basis that

the Appellants' specification is silent as to any purported advantages of the claimed differences. ***In re Chu***, 66 F.3d 292, 298-99, 36 USPQ2d 1089, 1094-95 (Fed. Cir. 1995). Furthermore, a "finding of 'obvious design choice' [is] precluded where the claimed structure and the function it performs are different from the prior art." ***Chu***, 66 F.3d at 299, 36 USPQ2d at 1095, ***citing In re Gal***, 980 F.2d 717, 719, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992).

Upon our review of the prior art and Appellants' specification, we note that the admitted prior art fails to teach a one piece electrode plate as well as a one piece electrode plate having different thicknesses and steps having

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inclined and continuous walls between the two portions. We fail to find that there is any suggestion in the admitted prior art to make the modification as proposed by the Examiner. Furthermore, we note that the Examiner cannot ignore limitations that are recited in Appellants' claims without considering the totality of the Appellants' disclosure. In particular, we note that the Appellants have disclosed on page 6 of the specification that there is a reason for the difference of thickness and the

inclined and continuous walls. In particular, Appellants disclose that the thickness of the two portions are different and the steps are formed to reduce the gap between the G2 electrode and the G3 electrode in order to improve the focusing performance without deteriorating the breakdown voltage characteristics.

We have not sustained the rejection of claims 1, 3 and 4 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

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REVERSED

	JAMES D. THOMAS)	
	Administrative Patent Judge)	
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PATENT)	BOARD OF
	MICHAEL R. FLEMING)	APPEALS AND
	Administrative Patent Judge)	INTERFER-
ENCES)	
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)	
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MRF:psb

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