

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RONALD VAN DER WILK

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Appeal No. 97-0124  
Application No. 08/273,672<sup>1</sup>

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ON BRIEF

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Before JERRY SMITH, FLEMING and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 2, and 4-10. Claim 3 has been indicated as containing allowable subject matter. An amendment after final rejection was filed February 23, 1996 but was denied entry by the Examiner. A further amendment after final rejection filed March 19, 1996 was entered by the Examiner.

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<sup>1</sup> Application for patent filed July 12, 1994.

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The disclosed invention relates to a cathode ray tube having an electron gun which includes a pair of spaced apart electrodes which are secured to insulating support members by connecting elements. More particularly, Appellant indicates at pages 3 and 4 of the specification that, by varying the widths of the connecting elements of adjacent electrodes, the "hopping" of electrons between electrodes can be reduced or eliminated.

Claim 1 is illustrative of the invention and reads as follows:

1. A cathode ray tube comprising: a display screen and an electron gun having a means for generating electrons, a number of electrodes and a support means which is composed of an insulating material, said electrodes being provided with respective connecting elements which are secured in the support means, wherein the electron gun comprises a pair of electrodes which are arranged one behind the other, said electrodes having the connecting elements extending in a plane transverse to the electron beam, and wherein the width of said connecting elements of one of the electrodes of the pair of electrodes differs from the width of the connecting elements of the other electrode of the pair of electrodes.

The Examiner relies on the following reference:

Guzowski et al. (Guzowski)            4,990,822            Feb. 05, 1991

Claims 4-9 stand finally rejected under 35 U.S.C. § 112, first paragraph, as being based on an inadequate disclosure. Claims 1, 4, and 7-10 stand finally rejected under 35 U.S.C. § 102(b) as being anticipated by Guzowski. Claims 2,

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5, 7, and 10 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Guzowski.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs<sup>2</sup> and Answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections and the evidence of anticipation and obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's answer.

Appellant's grouping of claims at pages 3 and 4 of the Brief is inconsistent with respect to the rejections and claim dependencies as noted by the Examiner at page 2 of the Answer. Accordingly, we will consider the claims separately only to the

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<sup>2</sup> The Appeal Brief was filed May 21, 1996. In response to the Examiner's Answer dated July 23, 1996, a Reply Brief was filed September 23, 1996 which was acknowledged and entered by the Examiner without further comment on October 9, 1996.

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extent that separate arguments are of record in this appeal. Any dependent claims not separately argued will stand or fall with their parent claim.

It is our view, after consideration of the record before us, that the disclosure in this application describes the claimed invention in a manner which complies with the requirements of 35 U.S.C. § 112. We are also of the view that the disclosure of Guzowski fully meets the invention as recited in claims 1, 4, 7/4, 8, 9, and 10/1. In addition, it is our opinion that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 2, 5, 7/5, and 10/2. Accordingly, we affirm-in-part.

We consider first the rejection of claims 4-9 under the first paragraph of 35 U.S.C. § 112. We note that the Examiner, instead of relying on the "written description" or "enablement" language of the statute, has used the terminology "lack of support" in the statement of the rejection. Our reviewing court has made it clear that written description and enablement are separate requirements under the first paragraph of 35 U.S.C. § 112. Vas-Cath Inc. v. Mahurkar, 935 F. 2d 1555, 1560, 19 USPQ 2d 1111, 1114 (Fed. Cir. 1991). The terminology "lack of

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support" has also been held to imply a reliance on the written description requirement of the statute. In re Higbee and Jasper, 527 F.2d 1405, 188 USPQ 488, 489 (CCPA 1976).

In view of the factual situation presented to us in this instance, we will interpret the Examiner's basis for the 35 U.S.C. § 112, first paragraph rejection as reliance on the "written description" portion of the statute. "The function of the description requirement [of the first paragraph of 35 U.S.C. § 112] is to ensure that the inventor has possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him." In re Wertheim, 541 F. 2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). "It is not necessary that the application describe the claim limitations exactly, . . . but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations." Wertheim, 541 F.2d at 262, 191 USPQ at 96 citing In re Smythe, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973). Furthermore, the Federal Circuit points out that "[i]t is not necessary that the claimed subject matter be described identically, but the disclosure originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed." In re Wilder,

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736 F.2d 1516, 1520, 222 USPQ 369, 372 (Fed. Cir. 1984), cert. denied, 469 U.S. 1209 (1985), citing In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983).

This rejection resulted from an amendment during prosecution which added claims 4-9 directed to an electron gun arrangement incorporated in a vacuum tube. The original specification and claims described only a cathode ray tube incorporating the electron gun structure with the Examiner concluding, therefore, that support existed only for claims drawn to a cathode ray tube. In response, Appellant contends that proper support exists in the original specification for the vacuum tube claims since a cathode ray tube is a species of the vacuum tube genus as evidenced by Appellant's submitted excerpt from Van Nostrand's Scientific Encyclopedia.

After careful consideration of the arguments of record, we are in agreement with Appellant's position as stated in the Brief. As correctly argued by Appellant, it is a well settled Patent and Trademark Office practice in the electrical and mechanical arts to permit generic claims even though only one species of the genus may be disclosed in the specification. Accordingly, we can not sustain the Examiner's rejection of claims 4-9 under the first paragraph of 35 U.S.C. § 112.

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We now consider the rejection of claims 1, 4, and 7-10 under 35 U.S.C. § 102(b) as anticipated by Guzowski. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Assoc, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claims 1 and 4, the Examiner has indicated how the various limitations are read on the disclosure of Guzowski. We note that the relevant portion of independent claim 4 (similar language appears in independent claim 1) recites:

... and the connecting element of one of said first and second electrodes is wider than the connecting element of the other one of said first and second electrodes in a direction transverse to the electron beam.

In addressing this limitation, the Examiner refers to the Figure 2 illustration of Guzowski. In the Examiner's view, this illustration clearly shows the width of the connecting element 50

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of electrode G3 being different from the width of connecting elements 82, 84 of electrode G4.

In response, Appellant contends that, since the disclosure of Guzowski indicates no awareness of the electron "hopping" problem addressed by Appellant, no concept for solving this problem could possibly be disclosed. Further, Appellant asserts that, since no description of the relative widths of the electrode connecting elements appears in Guzowski's disclosure, no conclusion can be drawn as to such relative widths from the Guzowski's Figure 2 illustration. In Appellant's view, since Guzowski specifically states (column 2, lines 31-32) that the drawings are not to scale, any depiction of differing widths of the connecting elements is purely fortuitous.

Upon careful review of the Guzowski reference in light of the arguments of record, we are in agreement with the Examiner's position as stated in the Answer. Initially we note that anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of inherent properties that may be possessed by the prior art references. Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). Our reviewing court has further held that

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the drawing in a utility patent can be cited against the claims of a utility patent application even though the feature shown in the drawing was unintended or unexplained in the specification of the reference patent. In re Aslanian, 590 F.2d 911, 200 USPQ 500 (CCPA 1979). In the present factual situation, we agree with the Examiner (Answer, page 5) that, even though the drawings in Guzowski may not be to scale, an inference can be drawn from Guzowski's Figure 2 as to the relative dimensions of the connecting elements 50 and 82, 84. It is apparent from this figure that Guzowski intended to convey that connecting element 50 has a different configuration than connecting elements 82 and 84, an indication of which is the clear disparity in width of the claw elements of the connectors. If Guzowski had intended for all the electrode connecting elements to be alike, it would have been an easy task to so illustrate. In view of the above, we sustain the Examiner's 35 U.S.C. § 102(b) rejection of independent claims 1 and 4.

With respect to dependent claims 7/4, 8, 9, and 10/1, we sustain the 35 U.S.C. § 102(b) rejection of these claims as well. As to multiple dependent claim 7, we have assumed, as has Appellant, that from the Examiner's statement of the rejection

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and arguments, claim 7 as depended from claim 4 rather than claim 5 (i.e., claim 7/4) is intended to be included in the 35 U.S.C. § 102(b) rejection. The Examiner has asserted the inherency of the connecting element illustration in Guzowski's Figure 2 as meeting the claim 7 requirements. We agree. In our view, from the illustration in Figure 2 of Guzowski depicting connecting elements having differing widths in a transverse direction, an imaginary line connecting the transverse edges of the connecting elements would necessarily be longer than a line extending along a parallel longitudinal axis between the connecting elements. With regard to dependent claims 8, 9, and 10/1, these claims have not been separately argued by Appellant and, accordingly, fall with their parent claim.

Turning to the obviousness rejection of claims 2, 5, 7/5, and 10/2, we note that in rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to

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modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

At the outset, we note that the limitations of dependent claims 2 and 5 require that the voltage applied to the electrode having the widest connecting elements be lower than that applied to the electrode with the narrowest connecting elements. In addressing these limitations, the Examiner, relying on the asserted common knowledge in the cathode-ray tube art of applying different voltages to adjacent electrodes, concludes that to

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provide a higher or lower voltage to an electrode having wider or narrower connecting elements is a matter of design choice.

After careful review of Appellant's arguments and the applied Guzowski reference, we are in agreement with Appellant's stated position in the Briefs. The Examiner's finding that the application of a lower voltage to the electrode having the wider connecting elements is an obvious design choice is not supported by the record. The 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, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). Although Guzowski suggests a differing voltage relationship between adjacent electrodes (column 3, line 25), we can find no basis on the record for the Examiner's conclusion that the skilled artisan would find it obvious to apply a particular higher or lower voltage to a particular electrode. It is our opinion that this modification of the prior art could only come from an improper hindsight reconstruction of the invention by the Examiner. In view of the above discussion we cannot sustain the Examiner's obviousness rejection of claims 2 and 5. Further, since all of the limitations of claims 2 and 5 are not suggested by the

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applied prior art, we also cannot sustain the Examiner's rejection of claims 7/5 and 10/2 which depend therefrom.

In conclusion, we have not sustained the rejection of claims 4-9 under 35 U.S.C. § 112 nor the rejection of claims 2, 5, 7/5, and 10/2 under 35 U.S.C. § 103, but we have sustained the rejection of claims 1, 4, 7/4, 8, 9, and 10/1 under 35 U.S.C. § 102(b). Accordingly, the decision of the Examiner rejecting claims 1, 2, and 4-10 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

JERRY SMITH	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
MICHAEL R. FLEMING	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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JOSEPH F. RUGGIERO	)	
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jrg

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