

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ROBERT M. GJULLIN

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Appeal No. 96-4005  
Application 08/183,531<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, 4, and 5, all of the claims pending in the present application. Claim 3 has been canceled. An amendment after final rejection was

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<sup>1</sup> Application for patent filed January 18, 1994.

filed December 26, 1995 which was denied entry by the Examiner.

The claimed invention is directed to a method of generating a terrain profile for an aircraft which uses terrain following flight control. More particularly, Appellant discloses at page 5 of the specification that terrain information along the aircraft's flight path is segmented into separate sample regions. The sample regions are wider nearer the aircraft and become increasingly narrower at larger distances from the aircraft as illustrated in Figure 1 of the drawings.

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

1. A method of generating a terrain profile on an aircraft's flight mission computer system using a sample region of digital terrain elevation data which corresponds to the aircraft's position and predicted flight path, the method comprising the steps:

identifying a plurality of sample regions located directly under and along the predicted flight path of the aircraft, said sample regions varying in dimension according to use criteria including possible short range terrain following commands, potential flight path deviations, and long range terrain following commands; and

transforming said sample regions into a terrain profile.

The Examiner relies on the following reference<sup>2</sup>:

Feuerstein et al. (Feuerstein)	4,805,108	Feb. 14, 1989
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Claim 4 stands finally rejected under 35 U.S.C. § 112, third paragraph, as being improperly

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<sup>2</sup> Although not expressly stated in the first sentence of the statement of the grounds of rejection in the Answer, the Examiner additionally relies on a description of the admitted prior art in Appellant's specification.

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dependent on a canceled claim. Claims 1, 2, 4, and 5 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Feuerstein and the admitted prior art. Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief 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 obviousness relied upon by the Examiner as support for the obviousness rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Brief along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that dependent claim 4 does not comply with the third paragraph of 35 U.S.C. § 112. We are also of the view that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claim 1. We reach the opposite conclusion with respect to claims 2, 4, and 5. Accordingly, we affirm-in-part.

Appellant has nominally indicated that the claims stand or fall together in a single group (Brief, page 2). Consistent with this indication, Appellant, in presenting several arguments, has

made no specific reference to particular claims to which certain arguments may apply. However, since the Examiner has addressed all of the claims individually, we will consider the claims separately to the extent that separate arguments are of record in this appeal.

With respect to the rejection of claim 4 under the third paragraph of 35 U.S.C. § 112, we agree with the Examiner that this claim is improperly dependent on canceled claim 3. We note that Appellant, while commenting on the failed attempt to correct the dependency problem at page 2 of the Brief, does not contest the appropriateness of this rejection. Accordingly, the rejection of claim 4 under 35 U.S.C. § 112, third paragraph is sustained.

We now consider the 35 U.S.C. § 103 rejection of claims 1, 2, 4, and 5 as unpatentable over Feuerstein and the admitted prior art. As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147

(CCPA 1976). Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Brief have not been considered [see 37 CFR § 1.192(a)].

With respect to independent claim 1, the Examiner has pointed out the teachings of Feuerstein and the admitted prior art, has pointed out the perceived differences between this prior art and the claimed invention, and has reasonably indicated how and why Feuerstein and the admitted prior art would have been modified and/or combined to arrive at the claimed invention. In our view, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has satisfied the burden of presenting a prima facie case of obviousness. That is, the Examiner's analysis, if left un rebutted, would be sufficient to support a rejection under 35 U.S.C. § 103. The burden is, therefore, upon Appellant to come forward with evidence or arguments which persuasively rebut the Examiner's prima facie case of obviousness. Appellant has presented several substantive arguments in response to the Examiner's rejection. Therefore, we consider obviousness based upon the totality of the evidence and the relative persuasiveness of the arguments.

We note at the outset that Appellant has not contested the Examiner's position concerning the obviousness of transforming sample regions into a terrain profile. Rather, Appellant's arguments in the brief center on an alleged deficiency in Feuerstein in disclosing the decreasing of the size of the sample

regions farthest from the aircraft once a large sample region related to potential course deviations is identified. In Appellant's view, Feuerstein's disclosure actually teaches away from the present invention since, in contrast to the presently claimed decreasing sample region size, the sample regions in Feuerstein increase in size with increasing distance from the aircraft.

After careful review of Appellant's arguments, it is our opinion that such arguments are not commensurate with the scope of independent claim 1. It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The present claim 1 does not recite the decreasing sample region size feature as argued by Appellant. Rather, claim 1 recites only "...sample regions varying in dimension according to use...". In our view, Feuerstein provides an explicit teaching of this recited feature. As can be seen from the illustration in Figure 1 of Feuerstein, the rough analyzer fan shaped sample region  $F_1$  varies in dimension from the fine analyzer sample region  $f_1$ . We further note that there are no reasons on the record before us, and Appellant has provided none, to question the Examiner's assertion (Answer, page 3) that short and long range terrain following

commands and potential flight deviations are inherent in any flight path. For all of the above reasons, the Examiner's rejection of claim 1 under 35 U.S.C. § 103 is sustained.

We now consider dependent claims 2 and 5 and refer to our earlier discussion of Appellant's arguments concerning the decreasing sample region size feature. While we found Appellant's arguments to be unpersuasive with respect to claim 1, we reach the opposite conclusion with respect to dependent claims 2 and 5. In contrast to claim 1, each of dependent claims 2 and 5 recite such decreasing sample region size feature. The relevant portion of claim 2 recites:

and the third region being a least  
volume and most distant from the aircraft;

Similarly, claim 5 recites:

a fourth sample region located furthest  
from said aircraft in relation to said  
first, second, and third sample regions,  
said fourth sample region having a  
minimum width dimension relative to the  
width dimensions of said first, second  
and third sample regions.

The Examiner has cited passages at lines 16-21 and 40-53 of column 4 of Feuerstein in support of the position that the above claimed features are disclosed in Feuerstein.

However, these excerpts from Feuerstein are concerned merely with sampling rate and flight computation variability, respectively, and, in our view, fall well short of describing the claimed decreasing sample region size as distance from the aircraft increases. In view of the above, we agree

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with Appellant that the Examiner has not established a prima facie case of obviousness and, therefore, we can not sustain the 35 U.S.C. § 103 rejection of claims 2 and 5.

With respect to dependent claim 4, the Examiner has included this claim in the 35 U.S.C. § 103 rejection despite the fact that its dependency from a canceled claim makes it impossible to make a comparison between what is claimed and the prior art. Were we to consider this claim on the merits it would fall with claim 1 since Appellant has provided no separate argument with respect to the claim limitations. However, we will summarily reverse this rejection since a claim which can not be completely understood cannot, logically, have prior art applied against it. By making this technical reversal of the prior art based rejection of claim 4, it should not be implied that the art relied on by the examiner would not be relevant relative to a claim of the present scope containing clear dependency. In re Steele, 305 F.2d 859, 862-863, 134 USPQ 292, 295 (CCPA 1962).

In summary, the rejection of claim 4 under 35 U.S.C. § 112 is sustained. The 35 U.S.C § 103 rejection is sustained with respect to claim 1 but is not sustained with respect to claims 2, 4, and 5. Accordingly, the decision of the Examiner rejecting claims 1, 2, 4, and 5 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be

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extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JERRY SMITH )  
Administrative Patent Judge )  
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MICHAEL R. FLEMING )  
Administrative Patent Judge )  
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JOSEPH F. RUGGIERO )  
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