The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 45

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSHIKI SHIROCHI

Appeal No. 1999-1657
Application No. 08/877,781

HEARD: March 15, 2001

Before BARRETT, FLEMING and LALL, Administrative Patent Judges

LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection[1] of claims 1 to 3, 5, 7 to 9, 11, and 13 to 17.

[1]The last amendment after the final rejection was filed as paper no. 32 and was entered into the record, paper no. 34. Claim 18 has been cancelled as per this amendment. Claims 4, 6, 10 and 12 have been indicated as containing allowable matter as per the examiner's answer, page 2. Also, the examiner indicated the withdrawal of the rejections under 35 U.S.C. § 112, 2nd paragraph on page 2 of the answer, thereby leaving only the rejection of the above cited claims under 35 U.S.C. § 103 for the purposes of appeal.

The disclosed invention relates to an imaging display apparatus and comprises a display device such as liquid-crystal display (LCD) and an optical filter having either one optical filter surface or two optical filter surfaces. The optical filter surface uses diffusion or refraction such as a microprism surface having a flat surface parallel to the LCD surface and four angular surfaces. These surfaces in conjunction with a limit view angle of the observer viewing the imaging display apparatus creates a modified diffused image. The diffusing system of the present invention intentionally creates a gap, smaller than the actual pixel gaps between the diffused pixel image so that focusing is facilitated while reducing the noticeable gap between the pixels. The invention is further illustrated by the following claim.

> 1. An image display apparatus for displaying an image to a predetermined observation point remote from said apparatus having a predetermined recognizable limit view angle, comprising:
>
> a display device having a plurality of pixels arranged in a mosaic pattern; and
>
> an optical filter surface disposed on a front face of said display device, so that said filter surface is disposed between said display device and

said

predetermined observation point, for diffusing each pixel of said display device into a plurality of parts by utilizing diffraction or refraction,

wherein a pixel mask gap interval is generated, corresponding in width to said predetermined recognizable limit view angle, between neighboring pixels after said diffusing of each of said pixels by said optical filter surface resulting in a focused display image viewable at said observation point.

The Examiner relies on the following references:

Greenspan	3,877,802	Apr. 15, 1975

Appellant's Admitted Prior Art (APA)

Claims 1 to 3, 5, 7 to 9, 11 and 13 to 17 stand rejected under 35 U.S.C. § 103 as being obvious over either APA alone, or over APA and Greenspan.

Rather than repeat the arguments of appellant and the examiner, we make reference to the briefs[2] and the examiner's answer for their respective positions.

OPINION

[2] A reply brief was filed (paper no. 36) and was considered and entered by the examiner, (paper no. 38).

We considered the rejections advanced by the examiner and the supporting arguments. We have, likewise, reviewed the appellant's arguments set forth in the briefs.

We reverse.

In our analysis, we are guided by the general proposition that 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 the applicant 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 persua-siveness 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). We are further guided by the precedence of our
reviewing court that the limitations from the disclosure are

not to be imported into the claims. In re Lundberg, 244 F.2d 543, 548, 113 USPQ 530, 534 (CCPA 1957); In re Queener, 796 F.2d 461, 464, 230 USPQ 438, 440 (Fed. Cir. 1986). We also note that the arguments not made separately for any individual claim or

claims are considered waived. See 37 CFR § 1.192(a) and (c). In re Baxter Travenol Labs., 952 F.2d 388, 391, 21 USPQ2d 1281, 1285

(Fed. Cir. 1991) ("It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for nonobviousness distinctions over the prior art."); In re Wiechert, 370 F.2d 927, 936, 152 USPQ 247, 254 (CCPA 1967)("This court has uniformly followed the sound rule that an issue raised below which is not argued in this court, even of it has been properly brought here by reason of appeal is regarded as abandoned and will not be considered. It is our function as a court to decide disputed issues, not to create them.”).

ANALYSIS

We consider the two rejections separately.

Rejections over the admitted prior art (APA)

The examiner asserts, final rejection at page 4, that

> Applicant's description of the related art, including disclosures of Figs. 7, 10 and 13, indicate that the prior art discloses the claimed invention except for particular relationships of spacing between resolvable image elements, an observation point, and a limit view angle, that obviously be related as claimed with a particular choice of observation point and limit view angle, the choice of which is unlimited as set out in the claims. Additionally, as far as the relationships relate to the intended use of the filter and display system, such cannot serve as a basis of patentability as is well set out in patent law.

Appellant counters, reply brief at page 4, that

> As shown in Figure 7, the generated gaps between the between the diffused pixels do not take into account the vignetting effect as shown in Figure 8 used by the present invention. Consequently, the conventional systems modify the diffusion number (n) until the gap between the diffused pixels (M) equals 0, i.e., all gaps between diffused pixels is eliminated. (See page 15, lines 1-4).

We find that the examiner cannot extrapolate APA to mean what appellant does not intend it to mean. In this case, the gap between the pixels does not exist in APA as stated by

appellant to be his admitted prior art.

As to the intended use argument by the examiner, appellant argues, brief at page 10, that

> [T]hese relationships [gap between pixels and the limit view angle] define the heart of the inventive subject matter as recited in the claims. In particular, independent claims 1 and 7 recite that the width of the generated gap interval corresponds to predetermined recognizable limit view angle. . . . Since these relationships are not mere intended use but an integral feature of the present invention, these relationships indeed give patentable weight to the claims [and] therefore should be considered.

We are persuaded by appellant's argument, and as a result, we find that the examiner is unjustified in holding that the recited limitation is "mere intended use" and has no patentable

weight. Therefore, we do not sustain the rejection of claims 1 to 3, 5, 7 to 9, 11, 13 and 17 over APA.

<u>Rejection over the APA and Greenspan</u>

Claims 1 to 3, 5, 7 to 9, 11, and 13 to 17 are rejected under 35 U.S.C. § 103 as being unpatentable over APA in view of Greenspan. The examiner asserts, final rejection at page

4, that

> [A]pplicant's own disclosed prior art discloses all of the features of the claimed invention except for the spacings of the image pixels being at the limit of resolution for a particular observation point. The patent to Greenspan, particularly column 17, line 49 through column 18 line 57, discloses designing pixel images in an image display to be spaced at the resolution limit of an observer. It would have been obvious to one of ordinary skill in the art to apply the teachings of Greenspan to applicant's own disclosed prior art to provide pixel images spaced at the resolution limit of an observer because such would serve the same desired purpose in the disclosed prior art as in the devices of Greenspan to provide high resolution display images at the limit of observer resolution.

We do not agree with appellant’s statement, brief at page 15, that “Greenspan is the same as the disclosed prior art system discussed in the background of the present invention in that optical filters 260, 270, 286 and 290 are used to eliminate the gap interval,” because Greenspan, in columns 17 and 18, does

disclose a method of designing the optical magnifying system in a manner that keeps)s (the claimed gap) from becoming 0. However, we do agree with appellant, brief at page 15, that

> Greenspan . . . discloses a method and apparatus for enlarging images without using lenses (microprisms) by utilizing a plurality of reflective surfaces. . . . Instead of using lenses to magnify the projected image, Greenspan uses reflective surfaces 46, 70 and 80 (Figure 2) to enlarge the image.

We find that Greenspan merely enlarges the size of each pixel via reflection, and does not create a plurality of pixels corresponding to each original pixel of the display, while keeping the created plurality of pixels separated by a nonzero gap. Furthermore, the combination of APA and Greenspan also does not meet the recited limitation "an optical filter surface . . . for diffusing each pixel of said display device into a plurality of parts by utilizing deflection or refraction". Therefore, we do not sustain the obviousness rejection of these claims over APA and Greenspan.

In conclusion, we have not sustained the rejections of claims 1 to 3, 5, 7 to 9, 11, and 13 to 17 under 35 U.S.C. § 103 over either APA, or APA and Greenspan.

Accordingly, the decision of the examiner rejecting these claims under 35 U.S.C. § 103 is reversed.

REVERSED

LEE E. BARRETT Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
PARSHOTAM S. LALL Administrative Patent Judge	)	

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