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. 40

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte JUNICHI ONISHI, AKIHIRO TAGUCHI, KENJI HARANO, AKINOBU UCHIKUBO, KENYA INOMATA, MAKOTO TSUNAKAWA, KUNIAKI KAMI, TSUTOMU HIRAI, TAKASHI TAKEMURA, MAMORU KANEKO, YASUKAZU TATSUMI and KYOU IMAGAWA

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Appeal No. 1999-2413
Application No. 08/754,203

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HEARD: October 16, 2001

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

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 3, 4, 6-16, 24, 25, 27-37, and 41-44. Claims 1, 2, 5, 17-23, 26, 38-40, and 45 have been canceled. An amendment filed November 25, 1998 after final rejection was approved for entry by the Examiner.

The disclosed invention relates to an image processing system for processing raw image video signals produced by a television camera in an apparatus such as an endoscope. The raw images are processed to produce at least one kind of a transformed image, such as a turned image or mirror image. Different images from among the transferred images are simultaneously provided for selective display on output apparatus such as a television monitor.

Claim 43 is illustrative of the invention and reads as follows:

43. An image processing apparatus, comprising:

a first image input means for inputting raw images;

a second image input means for inputting raw images different from said raw images fed to said first image input means;

an image processing means for processing at least one raw image among said raw images from said first and second image input means to produce at least one kind of transformed image;

a synthetic image producing means for synthesizing at least two images from among said raw images and at least one transformed images produced by said image processing means so as to produce at least a first synthetic image and a second synthetic image; and

an image output means having a first image output unit for outputting said first synthetic image and a second image output unit for outputting said second synthetic image.

The Examiner relies on the following prior art:

Eino et al. (Eino)	4,869,237	Sep. 26, 1989
Kikuchi	5,045,935	Sep. 03, 1991
Karasawa et al. (Karasawa)	5,196,928	Mar. 23, 1993

Claims 3, 4, 6-16, 24, 25, 27-37, 41, 43, and 44 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Karasawa in view of Eino.[1] In a separate rejection under 35 U.S.C. § 103(a), claims 3, 4, 6-11, 14-16, 24, 25, 27-30, 33-37, 43, and 44 stand finally rejected as being unpatentable over Karasawa in view of Kikuchi. Claim 42 stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Eino alone.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief and Answer for the respective details.

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 rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' 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.

[1] As a result of the entry of the Nov. 25, 1998 amendment after final rejection, the Examiner withdrew the 35 U.S.C. § 112, second paragraph, rejection of claims 9, 10, 12-16, 24, 25, 27-37, and 42.

Appellants indicate (Brief, page 5) that independent claim 43 and its dependent claims 3, 4, 6-16, 24, 25, 27-37, and 41 stand or fall together as a group, while independent claims 42 and 44 each stand or fall separately. We will consider the claims separately only to the extent that separate arguments are of record in this appeal. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

It is our view, after consideration of the record before us, 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 invention as set forth in claims 3, 4, 6-16, 24, 25, 27-37, 41, 43, and 44. We reach the opposite conclusion with respect to claim 42. Accordingly, we affirm-in-part.

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 Appellants to overcome the prima facie case with arguments 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).

With respect to independent claims 43 and 44, the Examiner, as the initial basis for the obviousness rejection, proposes to modify the endoscope system disclosure of Karasawa with the image processing teachings of Eino which describe the transformation of a raw image into a turned and/or inverted image for easier viewing on a display. In the Examiner's analysis (Answer, page 4), the skilled artisan would have been motivated and found it obvious to apply the raw image transforming teachings of Eino to the system of Karasawa, thereby arriving at Appellants' invention as claimed.

After reviewing the Examiner's analysis, it is our view that such analysis provides an indication of the teachings of the Karasawa and Eino references, reasonably indicates the perceived differences between this prior art and the claimed invention, and provides reasons as to how and why the prior art teachings would have been modified and/or combined to arrive at the claimed invention. In our opinion, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of obviousness. The burden is, therefore, upon Appellants to come forward with evidence

and/or arguments which persuasively rebut the Examiner's prima facie case of obviousness. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Brief have not been considered [see 37 CFR § 1.192(a)].

In response, Appellants' arguments, aside from a general assertion at page 9 of the Brief, do not attack the combinability of the Karasawa and Eino references.[2] Rather, these arguments center on the assertion that, even if combined, the references do not suggest Appellants' invention as claimed. In particular, Appellants assert that the combination of Karasawa and Eino does not disclose "...the output of two synthetic images, wherein the two synthetic images include both raw and transformed images" nor "the capability of selecting the preferred combination of raw and transformed images making up the synthetic images which are outputted." (Brief, page 10).

After careful review of the Karasawa and Eino references in light of the arguments of record, we are in agreement with the Examiner's position as stated in the Answer. We agree with the Examiner that Karasawa discloses the output of two synthetic

[2] Although Appellants have indicated that independent claim 44 stands or falls separately, no separate arguments for patentability based on the language of claim 44 have been set forth in the Brief.

images, as illustrated in the display of Figures 3b and 3c, from the raw images produced by two input image units. It is our view that when the system of Karasawa is combined with the inverted and turned image display teachings of Eino, the subsequent combination would result in a display of both raw and transformed images as claimed.

With respect to Appellants' argument concerning the alleged failure of the Examiner's proposed combination to suggest the feature of selecting a preferred combination of transformed images to be outputted, we find such argument to not be commensurate with the scope of the claims. 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). We find nothing in the language of the appealed independent claims

43 and 44 which requires any selection of a preferred combination of raw and transformed images for display.

In view of the above discussion, it is our opinion that since the Examiner's prima facie case of obviousness has not been rebutted by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 43 and 44, as well as dependent claims 3, 4, 6-16, 24, 25, 27-37, and 41 which fall together with their base claim 43, is sustained.

Turning to the Examiner's separate obviousness rejection of claims 3, 4, 6-11, 14-16, 24, 25, 27-30, 33-37, 43, and 44 based on the combination of Karasawa and Kikuchi, we sustain this rejection as well. In making this rejection, the Examiner utilizes a similar rationale to that discussed previously with regard to the combination of Karasawa and Eino. In the Examiner's view (Answer, page 7), the skilled artisan would have found it obvious to combine the transformed image teachings of Kikuchi, exemplified by the display representation in Figures 4A and 4B, with the two image input endoscope system of Karasawa.

After reviewing Appellants' arguments in response (Brief, pages 11 and 12), we find such arguments to be unpersuasive in overcoming the Examiner's prima facie case of obviousness. Appellants' initial argument calls attention to Kikuchi's

disclosure of a single dual display type monitor such as illustrated in Kikuchi's Figure 6. To the extent that this argument suggests that the appealed independent claims 43 and 44 require anything more than a single display unit, we reject such argument as unfounded. While claim 43 sets forth first and second image output units for outputting first and second synthetic images, this is not the same as requiring first and second display units. For example, Karasawa discloses first and second image output units (parent scope processor 5a and child scope processor 5b) which output synthetic images on the shared display monitor 6.

We further find to be without merit Appellants' contention (Brief, page 12) that the combination of Karasawa and Kikuchi would not result in a system which displays both raw and transformed images. In our view, Kikuchi provides a clear disclosure of the display of both raw and transformed images (Figures 4A and 4B) with an allocation of the different images to the main screen and sub-screen display areas of monitor 18 as desired (Kikuchi, column 6, lines 8-21).

We next consider the Examiner's obviousness rejection of independent claim 42 and note that, while we found Appellants' arguments to be unpersuasive with respect to the Examiner's obviousness rejection of claims 3, 4, 6-16, 24, 25, 27-37, 41, 43,

and 44 discussed supra, we reach the opposite conclusion with respect to claim 42. As the basis for the obviousness rejection of claim 42, the Examiner relies on Eino alone. In the Examiner's analysis (Answer, page 6), it is asserted that Eino, which explicitly discloses a single display unit for displaying a transformed image input from an endoscope, discloses the claimed invention except for the use of separate first and second display units for displaying raw and transformed images produced from an image input unit. Nevertheless, the Examiner suggests the obviousness to the skilled artisan of providing a separate display unit to enable a surgeon, for example, operating on a particular patient in a different orientation from a particular endoscope direction to see a correctly oriented display image.

After careful review of the Eino disclosure, we are in agreement with Appellants (Brief, page 11) that the Examiner has failed to establish a prima facie case of obviousness. We find no evidence provided by the Examiner that would support the obviousness to the skilled artisan of making the modification suggested by the Examiner. 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). In our opinion, any suggestion to extend the disclosure of Eino to include a second display unit for displaying two separate synthetic images, one of which is a transformed version of the other, could only come from Appellants' own disclosure and not from the teachings of the Eino reference. Accordingly, since we are of the opinion that the prior art applied by the Examiner does not support the obviousness rejection, we do not sustain the obviousness rejection of independent claim 42.

In summary, with respect to the Examiner's 35 U.S.C. § 103(a) rejection of the appealed claims, we have sustained the rejection of claims 3, 4, 6-16, 24, 25, 27-37, 41, 43, and 44, but have not sustained the rejection of claim 42. Therefore, the Examiner's decision rejecting claims 3, 4, 6-16, 24, 25, 27-37, and 41-44 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	)	
JOSEPH F. RUGGIERO Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)	

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