

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. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES R. MILCH and RONALD S. COK

Appeal No. 2005-0338
Application No. 10/003,840

ON BRIEF

Before RUGGIERO, BARRY and NAPPI, **Administrative Patent Judges.**

NAPPI, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1 through 20, 22 through 42 and 44 through 46. For the reasons stated *infra* we reverse the examiner's rejection of these claims.

The Invention

The invention relates to a method for reducing power used by a display device having light emitting pixels, by receiving formatted data to be displayed and modifying

the format of the data to reduce the number or intensity of bright pixels. See page 2 of appellants' specification.

Claim 23 is representative of the invention and is reproduced below:

23. A display system, comprising:

a) a display device having light emitting pixels;

b) a source of formatted information for presentation on the display device, the formatted information being defined by a markup language having tags and parameters associated with the tags;

c) means for modifying the tags and/or the parameters associated with the tags of the formatted information to reduce the number and/or intensity of bright pixels in a display of the formatted information to produce modified formatted information; and

d) means for rendering the modified formatted information for display on the display device.

References

The references relied upon by the examiner are:

Yasui et al. (Yasui)	5,248,963	Sep. 28, 1993
Reinhardt	5,598,565	Jan 28, 1997
Choi	US2001/0012005	Aug. 9, 2001
Funyu	6,320,587	Nov. 20, 2001 (filed Mar. 11, 1997)
Yamazaki et al. (Yamazaki)	US2002/0018060	Feb. 14, 2002 (filed Aug. 7, 2001)
Helman et al. (Helman)	6,400,371	Jun. 4, 2002 (filed May 18, 1998)

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Paolini et al. (Paolini)	US2002/0196257	Dec. 26, 2002 (filed Jun. 25, 2001)
Oshima et al. (Oshima)	6,535,985	Mar. 18, 2003 (filed May 30, 2000)

Rejections at Issue

Claims 1, 2, 4, 7, 8, 15, 16, 20, 23, 24, 26, 29, 30, 37, 38 and 42 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman.

Claims 5, 6, 27 and 28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Oshima. Claims 3, 9, 11, 17, 25, 31, 33 and 39 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Yamazaki. Claims 10 and 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman, Yamazaki and Oshima. Claims 12, 14, 34, and 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Paolini. Claims 13 and 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman, Yamazaki and Paolini. Claims 18, 40, 45 and 46 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Yasui. Claims 19 and 41 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Choi. Claims 22 and 44 stand rejected under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman and Funyu.

Opinion

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner 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, the appellants' 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.

With full consideration being given to the subject matter on appeal, the examiner's rejections and the arguments of appellants and examiner, for the reasons stated *infra*, we will not sustain the examiner's rejection of claims 1 through 20, 22 through 42 and 44 through 46 under 35 U.S.C. § 103.

Appellants argue on page 4 of the brief that:

The combination of Reinhardt and Helman et al., however, does not teach or suggest the present invention, which is directed to the modification of tags and/or parameters associated with the tags of formatted information defined by a markup language to achieve power savings in a display of the formatted information on a display device. Rather, the combination as proposed by the Examiner, if anything would suggest the modification of tag information in a color television signal to minimizing display artifacts while preserving the relative visual contrast between foreground and background. The problem solved by Helman et al. (i.e. reducing artifacts) is simply a different one than that solved by Reinhardt (i.e. saving power), and there is no suggestion in either Reinhardt or Helman et al. to modify the method of Reinhardt in light of the teachings of Helman et al. in order to obtain the present claimed invention.

In response, the examiner states, on pages 13 and 14 of the answer:

Reinhardt teaches a method for screen power saving by reducing power to a subset of displaying pixels according to the user (lines 10-14 of column 4 and lines 12-32 of column 5 and Fig. 3a). Reinhardt teaches allowing each individual software program to determine which pixels are important to the user

and which pixels are not as important (lines 3-6 of column 5). Reinhardt does not disclose modifying the tags and/or the parameters associated with the tags of formatted information defined by a markup language. Helman discloses modifying tags and/or the parameters associated with the tags of formatted information defined by a markup language in a television signal chrominance adjustment method (lines 57-67 of column 2 and lines 8-12 and 51-58 of column 4). Helman teaches the foreground color is modified such that the difference between the foreground luminance Y_f and background luminance Y_b is increased by the same scaling factor used to reduce the chrominance (lines 51-58 of column 4 and lines 15-25 of column 5). The scaling of luminance/chrominance affects the power consumption levels of display. By reducing the luminance/chrominance, the intensity of bright pixels must be reduced. This results in a reduction of power to be achieved. Helman further teaches the setting of colors has advantages in visual clarity, as it allows the manufacturer to set colors which minimize artifacts between foreground and background colors (lines 35-38 of column 4). A minimization of artifacts will result in reducing the number of bright pixels. Artifacts are well known in the graphic arts as unwanted added noise. It would have been obvious to one of ordinary skill in the art to utilize the teaching of Helman to provide an improved method and system for presenting color television signal by minimizing display artifacts while preserving the relative visual contrast between foreground and background (lines 46-55 of column 1, Helman).

While we concur with the examiner's findings directed to the Reinhardt, we disagree with the examiner's findings directed to Helman and the examiner's conclusions based upon the combined teachings of the references.

However, before we consider the teachings of the references applied we first determine the scope of the claims. Independent claims 1 and 23 both contain the limitations of "formatted information for presentation on the display device, the formatted information being defined by a markup language having tags and parameters associated with the tags" and "modifying the tags and/or the parameters associated with the tags of the formatted information to reduce the number and/or intensity of bright pixels in a display format of the formatted information to produce modified formatted

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information.” Thus, the scope of the claims includes that information defined by a mark up language is modified to reduce either the intensity or number of bright pixels, or both.

As stated above, we concur with the examiner’s statement concerning the teaching of Reinhardt. Reinhardt’s teaching is to reduce power consumed by a display by reducing power to all pixels but “important pixels.” The program running on the computer can determine the important pixels or, if the program does not determine important pixels, the power to all pixels but those proximate the cursor will be reduced. (See column 6, lines 14-19 and lines 38-49). Reinhardt teaches that the reduction in power is achieved by reducing the refresh rate or the frame rate of the panel. (See column 4, lines 29-41). We find, as the examiner states on page 13 of the answer, that Reinhardt does not teach modifying tags or parameters associated with tags of formatted information defined by a markup language.

We concur with the examiner that Helman teaches a system to reduce the artifacts in an image generated by a computer, such as a web page, for presentation on a color television. (See column 2, lines 35-46 and lines 57-65). We find that Helman teaches that the web pages, Hyper Text Markup Language (HTML) documents, contain tags, which set colors to be displayed in the web page. (See column 4, lines 51-59). Helman’s method reduces artifacts by adjusting the chrominance of the image to reduce the difference between the foreground chrominance and the background chrominance; we do not find that Helman has a bias toward increasing or decreasing the brightness or the number of the pixels in adjusting the chrominance. (See column 3, lines 37-45).

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Similarly, Helman teaches luminance adjusted to increase the luminance difference between the foreground and the background and we find that Helman does not teach a bias toward increasing or decreasing the brightness or the number of the pixels in adjusting the luminance. (See column 4, lines 16-23). Thus, contrary to the examiner's assertion, we do not find that Helman's adjustment of the chrominance and luminance to teach or suggest reducing the number or intensity of bright pixels.

While we recognize that Reinhardt's power reducing system is operational with programs which do not identify "important pixels" we do not find that use of Reinhardt's system to display HTML documents, which have tags that set colors (such as disclosed by Helman), teaches or suggests the claimed invention. As stated *supra*, Reinhardt teaches reducing the power consumed by a display panel by adjusting the refresh rate or frame rate of the panel. Helman discloses that the tags contain instructions relating to the colors displayed and we find no disclosure that the tags contain data concerning the refresh rate or frame rate of the display. This, if Reinhardt's system were to operate to reduce power in the display of a HTML document, the system would not be modifying the tags or a parameter associated with the tags of the formatted information as is claimed. Accordingly, we find that the combination of the references does not teach all of the limitations of independent claims 1 and 23 and we will not sustain the examiner's rejection of claims 1, 2, 4, 7, 8, 15, 16, 20, 23, 24, 26, 29, 30, 37, 38 and 42 under 35 U.S.C. § 103 as being unpatentable over Reinhardt, in view of Helman.

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In rejecting the remainder of the dependent claims the examiner relies upon the combination of Reinhardt and Helman, discussed above, in combination with Oshima, Yamazaki, Paolini, Yasui, Funyu and Choi. The examiner does not assert, nor do we find that either Oshima, Yamazaki, Paolini, Yasui, Funyu and Choi alone or in combination, teach or suggest modifying tags or parameters associated with the tags of formatted information to reduce the number of bright pixels in a display as is claimed. Accordingly, we will not sustain the examiner's rejection of dependent claims 3, 5, 6, 9 through 14, 17, 18, 19, 22, 25, 27, 28, 31 through 36, 39 through 41, and 44 through 46. In summary, we reverse the examiner's rejection of claims 1 through 20, 22 through 42 and 44 through 46 under 35 U.S.C. § 103.

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