

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID C. STEPHENS

Appeal 2007-3179
Application 10/179,716
Technology Center 2600

Decided: February 25, 2008

Before KENNETH W. HAIRSTON, ROBERT E. NAPPI,
and KARL D. EASTHOM, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION ON APPEAL

We affirm-in-part.

This is a decision on appeal under 35 U.S.C. § 134(a) from the Final Rejection of claims 1-29. We have jurisdiction pursuant to 35 U.S.C. § 6(b).

BACKGROUND

The claims are directed to methods and apparatus for editing images. According to Appellant, one aspect of the invention entails revealing a

clipped portion of the image object as a transparent image overlay. Another advantageous aspect is that a lower order object (in the z-order) can be seen under the overlay. (Spec.: par. 0003-04).

Claims 1 and 10 are illustrative of the claims on appeal:

1. A method comprising:
presenting a visual representation of an image object having a clipped portion hidden from view in the visual representation; and
during an edit operation, revealing the clipped portion of the image object as a transparent image overlay in the visual representation.

10. A software product tangibly stored on a machine-readable medium, the software product comprising instructions operable to cause a programmable processor to perform operations comprising:
drawing a first visual representation of an image object in an edit mode that reveals a clipped portion of the image object in the first visual representation, the first visual representation allowing at least a portion of an object lower in a drawing order and underneath the revealed clipped portion to show through the revealed clipped portion; and
in response to termination of the edit mode, drawing a second visual representation of the image object in which the clipped portion of the image object is hidden, such that the at least a portion of the lower object is visible and unobscured by the clipped portion.

The References

Kay	US 6,377,269	Apr. 23, 2002
Haeberli	US 6,587,596	Jul. 1, 2003

Rejections Appealed

Claims 1-2, 7-13 and 15-26 stand rejected under 35 U.S.C. § 102 as being anticipated by Haeberli.

Claims 3-6, 14 and 27-29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Haeberli in view of Kay.

Appellant contends that the Examiner erred because in Haeberli, “the selected image itself never has its clipped portion revealed as a transparent image overlay.” (Br. 6) (emphasis original). Appellant also contends that the Examiner erred because Haeberli fails to disclose the claim 10 element “allowing at least a portion of an object lower in the drawing order and underneath the revealed clipped portion to show through the revealed clipped portion” (Br. 10). Appellant groups claims 1 and 7 together, and separately argues claims 10 and 22. Appellant does not separately argue claims 2-6, 8-9, 11-21, and 23-29. Thus, we group claims 1 to 2 and 7 to 9 together. We also group claims 10 to 13 and 15 to 26 together. We take claims 1 and 10 as representative of the claims on appeal. See 37 C.F.R. § 41.37(c) (1) (vii).

Issue

For claim 1, the issue is whether Haeberli discloses “the clipped portion of the image object as a transparent image overlay in the visual representation.”

For claim 10, the issue is whether Haeberli discloses “an object lower in a drawing order and underneath the revealed clipped portion to show through the revealed clipped portion.”

We affirm-in-part.

PRINCIPLES OF LAW

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *See Verdegaal Bros., Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 108 S.Ct. 95 (1987). However, “[t]he law of anticipation does not require that the reference ‘teach’ what the

subject patent teaches. Assuming that a reference is properly ‘prior art,’ it is only necessary that the claims under attack, as construed by the court, ‘read on’ something disclosed in the reference, i.e., all limitations of the claim are found in the reference, ... or ‘fully met’ by it.” *See Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983).

“Implicit in our review of the [Examiner’s] anticipation analysis is that the claim must first have been correctly construed to define the scope and meaning of each contested limitation.” *See Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997). During examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Although claims are to be interpreted in light of the specification, limitations from the specification are not to be read into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). The scope of a disputed term is not limited by the preferred embodiments absent an express disclaimer by Appellant of a broader definition. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

FINDINGS OF FACT (FF)

1. Appellant defines an image object as data, or a set of instructions, with an associated clipping definition including a masking region:

An image object includes data and represents an abstract image independent of a particular display system. An image object can be an imported image that is positioned on a spread or canvas. An image object can be a raster graphic, a vector graphic, *a set of instructions that when executed result in an image* (e.g., instructions that can describe vector based objects or raster objects within a single image); a PDF (Portable Document Format) graphic, an EPS (Encapsulated

PostScript) graphic, and/or other objects native to the imaging application 110...

For example, an image object *can have an associated clipping definition that defines a clipped portion of the image object, which is a portion of the image object data that is hidden from view.* A clipping definition can be a containing frame and/or *a mask region.* A containing frame is a rectangular boundary that defines the border of a clipping such that all data in an image object that falls outside this boundary is clipped, or hidden from view....A mask region is an arbitrarily shaped region that defines the clipped portion, either expressly or inherently. The mask region can be defined by a clipping path or an image mask (e.g., a bitmap), which can be a hard-edged mask or a soft-edged mask. An image object can have both an associated containing frame and an associated mask region, which combined represent the clipping definition for the image object.

(Spec.: par. 0017-18) (emphasis supplied).

2. Appellant's Figure 3 is reproduced below.

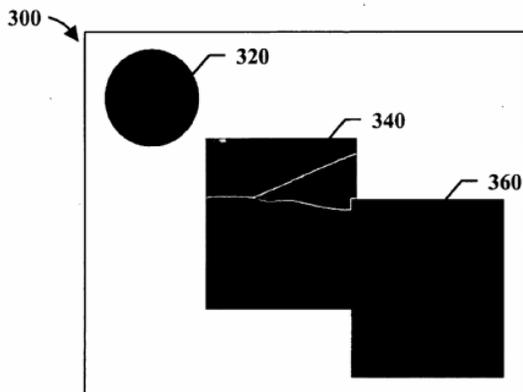


FIG. 3

Appellant's Figure 3 reproduced above depicts an image object having three layers of images 320, 340, and 360 in successive z-order - 320 is lower in z-order than 340 which is lower in z-order than 360. (Spec.: Fig. 3).

3. Appellant's Figure 4 is reproduced below.

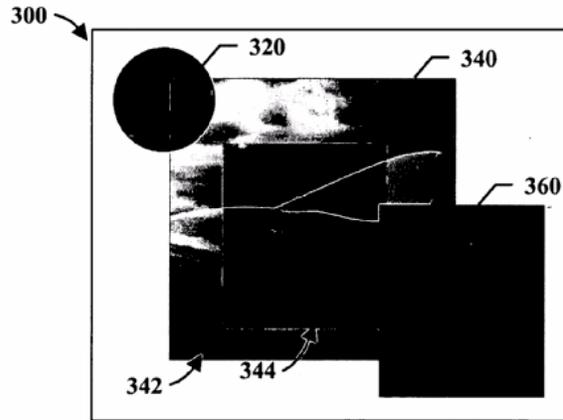
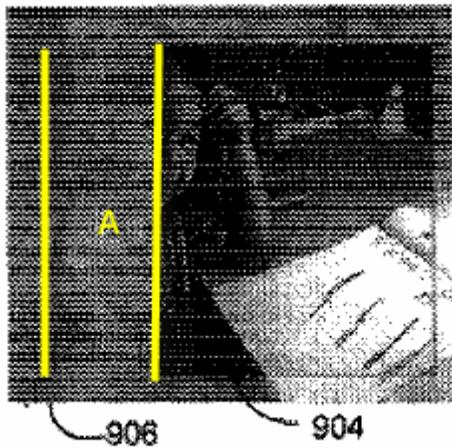


FIG. 4

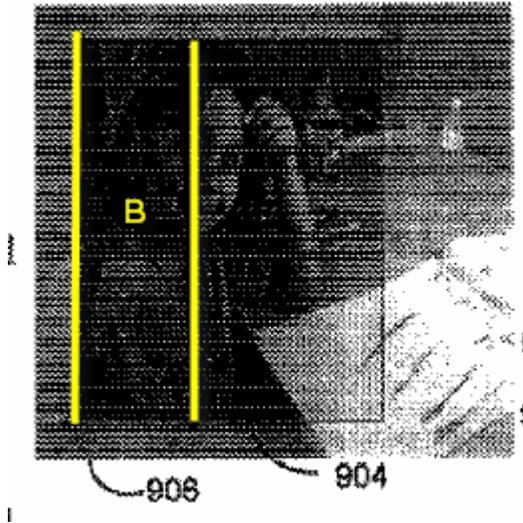
Appellant's Figure 4 reproduced above depicts his Figure 3 with a transparent mask 340. (Spec.: Fig. 4).

4. A modified portion of Haerberli's Figure 9a is reproduced below.



A modified portion of Haerberli's Figure 9a as reproduced above depicts mask portion 906 modified to include a region designated by label A, and an image object 904.

5. A modified portion of Haerberli's Figure 9b is reproduced below.



A modified portion of Haerberli's Figure 9b as reproduced above depicts mask portion 906 modified to include a mask region designated by label B, and also depicts the image object 904 having the mask 906 shifted with respect to its position in Figure 9a (*see* FF 4).

6. A selected portion of Haerberli's Figure 9a is reproduced below.



A portion of Haerberli's Figure 9a is reproduced above showing only a selected portion 904 - without the checkerboard mask portion 906 and

portions of 904 underneath that mask portion - as compared to the portion of Figure 9a depicted in Haeberli and depicted above (FF 4).

7. Referring to Figures 9a-9b, Haeberli describes the process of cropping which is used to isolate a selected portion of an image to render that selected portion visible for later placement on an image based product (col. 13, ll. 32-48). “[A]n image based product (such as an image print [or buttons, posters, mugs, clothing etc.]) can be generated showing only the person’s face.” (Col. 13, ll. 43-45, col. 9, ll. 3-7). We depict the selected portion of 904 above (FF 6) (in relation to the total image object 906 and 904 also depicted above (FF 4)). The selected portion (*see* FF 6) is what remains visually of the portion of the total image 904 and 906 after cropping the mask portion 906 and portions of 904 under the cropped mask portion. That is, a portion of mask 906 (the checkerboard portion) and the portion of 904 (which is partially visible under the checkerboard portion of mask 906) in Haeberli’s Figure 9a (see FF 4) is cropped and “is not included (or otherwise made visible) in... the selected image” (col. 13, ll. 38-41). (*See also* Haeberli, col. 13, ll. 26-65). A user interface 900 allows a user to select a shape of the selected portion 904 by clicking on one of the crop shape buttons 912. (Col. 13, l. 66 to col. 14, l.1).

8. The mask portion 906 depicted in Haeberli’s Figures 9a and 9b is a foreground image having a checkerboard portion and a transparent portion overlaying a totally visible selected portion of the background image 904. The checkerboard portion of mask 906 has alternating transparent and opaque pixels through which only limited portions of 904 are visible. (Col. 13, ll. 46-65). Both images 904 and 906 are stored in an HTML table cell (col. 13, ll. 46-51).

The background image is a JPEG-formatted version of the selected image. The foreground image is a GIF image *in which the pixels associated with the selected portion 904 are transparent* and the pixels associated with the cropped portion 906 create checkerboard pattern of alternating transparent and white (opaque) pixels. *The foreground image is used as a “crop mask” that is superimposed over the background image when the HTML table cell is displayed.* Only those pixels in the background image associated with a transparent pixel in the foreground image will be visible through the foreground image. As a result, all of the pixels of the selected portion 904 of the background image will be visible through the foreground image, while the cropped portion 906 of the background image will appear in a checkerboard pattern.

(Haeberli, col. 13, ll. 51-65) (emphasis supplied).

ANALYSIS

Appellant argues that “Haeberli fails to show or describe revealing a clipped portion of an image object as a transparent image overlay.” (Br. 4) (emphasis original). Appellant characterizes Haeberli as disclosing two “separate and distinct image objects,” (Br. 5) - one to be cropped (the mask 906) and another underlying image 904 (*see* FF 4, 5 - depicting Haeberli’s Figures 9a and 9b in modified forms respectively).¹ As Appellant’s argument goes, since the image object 906 has the transparent portion, “the selected image [904] itself never has its clipped portion revealed as a transparent image overlay.” (Br. 6) (emphasis original). We disagree with Appellant’s characterization of Haeberli as disclosing two separate and distinct image objects 904 and 906.

¹ Haeberli’s Figures 9a (*see* FF 4) and 9b (*see* FF 5) are reproduced in part as modified above respectively to designate a checkerboard clipped portion A and transparent clipped portion B of mask 906.

That is, we find that Haeberli's depicted image object 904 and mask 906 (*see* FF 4, 5) are ultimately combined into one set of program instructions which we interpret as one image object (FF 8). Under a first interpretation of the claim, we define the portion A of the foreground image 906 and the portion 904 of the background image to be "an image object." Under a second alternative interpretation, we define the foreground image 904 and the portion 906 of the background image to be "an image object." Our interpretations are consistent with Appellant's definition of "an image object" as a set of program instructions or data (FF 1).

While it is unclear from Appellant's Specification exactly how the mask and underlying image regions are digitally represented, Haeberli discloses two sets of program instructions for each image object - a JPEG file (for the background image 904) and a GIF file (for the mask image 906). The two files are combined to form an image object defined by another set of program instructions - an HTML table (FF 8). We find that a portion (under the first interpretation) or all (under the second interpretation) of Haeberli's HTML table constitutes a set of program instructions.² Our interpretations are consistent with Appellant's disclosed description of an image object. To wit: Appellant's "image object can have an associated clipping definition...[which can be] a mask region [which] is an arbitrarily shaped region that defines the clipped portion, either expressly or inherently...[or is] defined by... an image mask (e.g., a bitmap)." (FF 1)

² Under the first interpretation, we define only those portions of the HTML table that correspond to the bit region A of 906 and the underlying background image 904 to be a set of program instructions that meet the claim limitation "an image object."

Similarly, Haeberli's HTML instructions associate the pixels in the portion A (*see* FF 4) or the whole mask 906 as an arbitrarily shaped mask region that defines a (clipped) portion A of mask 906 or all of the (clipped) checkerboard portions of mask 906 (*see* FF 7, 8) akin to Appellant's image mask bit map. Accordingly, we determine the portion of the HTML table defining background image 904 and the foreground image 906 or its portion A to constitute an image object as claimed.³

We also determine that a clipped *portion* A of mask layer 906 of the image object 904 and 906 is "hidden from view" in the visual representation

³ The background portion of the image object 904 does not change from Figure 9a to 9b while the foreground mask image 906 does change (i.e., it shifts) from Figure 9a to 9b (Haeberli col. 15, ll. 4-16; Figs. 9a-9b; FF 4-5). Under the first interpretation, we determine that "an image object" (claim 1, line 2) is met by the combination of the checkerboard *foreground* portion A of 906 (i.e., "a clipped portion of the image object hidden from view in the visual representation") and the underlying background portion of the image object 904. Hence, turning to claim 1, a clipped portion A (claim 1, lines 1-2) is revealed as a transparent portion B of "the image object" (claim 1, lines 3-4) comprising background 904 plus portion A of foreground mask 906. Under the second interpretation, the claim limitation "the image object" comprises more opaque image portions in the mask 906 (and consequently more program instructions corresponding to those opaque regions) on the right-hand side of the mask (as depicted in FF 5) as compared to the claim limitation "an image object" (which we define as depicted in FF 4). Therefore, "the image object" 904 plus 906 (as depicted *supra* at FF 5) comprises all of "an image object" 904 plus 906 (as depicted *supra* at FF 4), and meets the claim limitations - despite the fact that more program instructions exist in the HTML table for "the image object" as compared to "an image object" - because "the image object" *comprises the same* "an image object."

of the selected portion of 904 (depicted *supra* at FF 6).⁴ During an edit operation, the clipped portion A (*see* FF 4) is revealed as a transparent image overlay B (*see* FF 5). That is, the clipped portion A and the transparent clipped portion B designate the same bit or pixel areas of the mask 906; and therefore, area A of mask 906 represents the clipped portion “hidden from view in the visual representation”⁵ of the selected portion of 904 (depicted *supra* at FF 6).⁶

⁴ Under both the first and second interpretations, while Haeberli’s whole checkerboard portion of mask 906 and the portion of image 904 underneath the checkerboard portion are clipped and hidden from view in the depiction of the selected portion 904 (*see* selected portion 904 depicted at FF 6, *see also* FF 7-8), the claim requires “an image object having a clipped *portion* hidden from view.” We determine that the claim limitation of a clipped *portion* hidden from view does not require Haeberli’s *whole* clipped image hidden from view to meet the claim. Therefore, “an image object having a clipped *portion* hidden from view” is met by the portion A of the foreground mask 906 (*see* FF 4), notwithstanding that other portions of Haeberli’s mask 906 and object 904 are hidden from view. *See Crystal Semiconductor Corp. v. TriTech Microelectronics International, Inc.*, 246 F.3d 1336, 1347 (Fed. Cir. 2001) (“[B]ecause claim 1 is open-ended, the limitation ‘disposed over a portion’ means ‘disposed over at least one portion.’”).

⁵ Appellant discloses two different visual representations: (*see* Spec.: Figs. 3-4, reproduced above respectively as FF 2-3). Hence, while the claim refers to “*the* visual representation” (*see* claim 1, ll. 3, 5), we do not interpret the claim to require *the* visual representation to remain unchanged since the claim requires the visual representation to change during the edit operation. That is, Appellant’s claim, corresponding to his disclosure, dictates that the visual representation changes - Appellant’s mask changes from hidden (*see* FF 2) to transparent (*see* FF 3) during *the* visual representation.

⁶ According to Appellant, “an image object *can have an associated clipping definition that defines a clipped portion of the image object, which is a portion of the image object data that is hidden from view.*” (FF 1). Thus, the checkerboard mask portion 906 (including portion A) is hidden from view (Footnote continued on next page)

Appellant also argues that even if Haeberli's two images 904 and 906 constitute one combined image object, the combined image object is not an "overlay" as claimed (Br. 9). That is, Appellant contends that there is no indication that the "combined image allows other image objects to be visible below its cropped portion." (Br. 9). We determine that the claim does not require the combined image to be an overlay.

Rather, the claim requires "revealing the *clipped portion* of the image object *as a transparent image overlay*." We have already determined that Haeberli discloses the claimed *clipped portion A* of foreground mask 906 (*see* FF 4) as hidden from view (*see* FF 6) and revealed as a transparent image overlay B (*see* FF 5). The *clipped portion B* (FF 5) is an overlay because it allows the left-hand side of the little girl's face in lower portion 904 of the image object to be visible. Consequently, we determine that Haeberli discloses "revealing the *clipped portion* of the image object as a transparent image overlay" during the edit operation - meeting the claimed element in dispute.

Finally, under a third alternative interpretation similar to the second, we determine that Haeberli teaches the mask region A of 906 (*see* FF 4) turning transparent to reveal the whole original image 904 without the other portions of the mask 906 becoming opaque (i.e., as depicted in Haeberli's

once the selected image of background portion 904 is cropped. The mask 906 designates the transparent area of foreground mask 906 as selected (Haeberli's Fig. 9a, FF 4, FF 7). We produce the selected portion of 904 corresponding to the transparent portion of mask 906 at Finding of Fact 6 just as Haeberli discloses it by description - as selected by mask 906 in Figure 9a (FF 7, 8). The mask portions 906 are stored during the selection (editing) process (see Haeberli, col. 15, ll. 4-16, col. 21, ll. 36-55).

Figure 9a above the “Reset to original” designation - showing the whole original picture of the little girl and book prior to cropping).⁷ Under this third interpretation, “an image object” and “the image object” of the claim is met by the whole image object 904 and 906. Thus, the visual representation as depicted *supra* (FF 6) represents Haerberli’s selected portion while A or a portion of A (*see* FF 4) represents the clipped portion hidden from view. We find Haerberli teaches rendering the clipped portion A (“hidden from view in the visual representation”) as a transparent overlay (“during an edit operation”) to the background image 904 via use of the choices under buttons “Select a crop shape” and “Use Crop Controls” (Fig. 9a; col. 13, l. 66 to col. 14, l. 24).

Under this third interpretation, the crop shape selection “Whole” (Fig. 9a) renders virtually the whole original image 904 as selected with a transparent mask overlay 906 over virtually the whole picture. Hence, we find that Haerberli’s disclosure contemplates starting with the “Square” selection as depicted at Figure 9a, cropping that image so that the mask portion A of 906 is hidden from view in the visual representation, and then, during an edit operation, changing the shape to select the whole image 904 by selecting the “Whole” choice in contemplation of further or different cropping of the original picture.⁸

⁷ The original whole picture of the girl and book as represented above the “Reset to original” designation in Figure 9a may or may not have a mask associated with it – but we use the original whole picture here only to depict what appears when the mask portion A of 906 (*see* FF 4) becomes transparent without other portions of the mask 906 becoming opaque.

⁸ Haerberli discloses that “[c]licking on one of the crop shape buttons ...selects which product attribute to *change*” (col. 14, ll. 2-3) (emphasis (Footnote continued on next page)

Turning to claim 10, we agree with Appellant that Haerberli does not disclose allowing “at least a portion of an object lower in a drawing order and underneath the revealed clipped portion to show through the revealed clipped portion” (Br 10). The Examiner determined that an object lower in drawing order meeting the claim limitation is disclosed as Haerberli’s “preview image.” (Ans. 6). “A preview image is a visual representation of an image-based product incorporating the selected image.” (Haerberli, col. 9, ll. 7-9). That is, a preview image is a combined image depicting the selected image superimposed on other products such as “prints, buttons, posters, mugs, clothing, and cards in which at least a portion of one or more images is printed or otherwise incorporated or embodied.” (*Id.* at ll. 5-7, *see also* FF. 7).

While we agree with the Examiner that such an image-based product (i.e., lower z-order image of button, mug, etc. with higher z-order image face) represents an object lower in drawing order, we also agree with Appellant that Haerberli does not disclose such an object as “show[ing] through the revealed clipped portion” (i.e., the clipped portion B). We consider that the Examiner’s argument may be based on inherency. However, while it may be probable or possible that another product such as a button, or mug, etc. might be depicted as a lower order image object visible underneath the revealed clipped portion, to establish inherency, the

supplied). We find that Haerberli’s disclosure necessarily teaches each one of four limited choices of change remaining under the “Select a crop shape” button – teaching a *change* of shape of the selected portion 904 from the “Square” choice depicted as selected in Figure 9a to the new shape “Whole” (or any of the other three shape changes “4 x 6”, “5 x 7,” or “8 x 10”).

missing object must be *necessarily* present, as opposed to possibly or probably present “underneath the revealed clipped portion.” *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1995). And since the lower order image (i.e., button or mug, etc.) may be in the center of the image object and not necessarily under the revealed clipped portion, the claim 10 limitation discussed here and above is not found in *Haeberli*, either explicitly, implicitly, or inherently.⁹ Accordingly, we will not sustain the Examiner’s 35 USC § 102 rejection of claim 10.

CONCLUSION

Appellant failed to meet the burden of asserting error in the Examiner’s rejection as to claim 1. *See In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick, Co.*, 464 F.3d 1356, 1360-61 (Fed. Cir. 2006). On the other hand, Appellant has sustained the burden on appeal of showing that the Examiner erred in the rejection of claim 10. Accordingly, we sustain the Examiner’s rejection of claim 1. Claims 2 through 6 depend from claim 1. Appellant has not separately argued claims 2 through 9. Appellant grouped independent claim 7 with claim 1. (Br. 4). We also determine that claim 7

⁹ It also follows that *Haeberli* does not disclose the limitation “drawing a second visual representation of the image object in which the clipped portion of the image object is hidden, such that the at least a portion of the lower object is visible and unobscured by the clipped portion” as Appellant argued (Br. 9-10).

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involves limitations similar to that of claim 1. Therefore, we also sustain the Examiner's rejections of claims 2 through 9.

We will not sustain the Examiner's rejection of claim 10. Since claims 11 to 21 ultimately depend from claim 10, we also will not sustain the Examiner's rejection of claims 11 to 21. Further, since claim 22 has similar limitations to claim 10 which we have determined above not to be disclosed by Haeberli, and since claims 23-29 ultimately depend from claim 22, we also will not sustain the Examiner's rejection of claims 22-29.

DECISION

The decision of the Examiner is *affirmed-in-part*.
The Examiner's decision rejecting claims 1-9 is affirmed. The Examiner's decision rejecting claims 10 to 29 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED-IN-PART

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