

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of: Robbins	§	
	§	
U.S. Patent No. 6,326,978	§	Petition for <i>Inter Partes</i> Review
	§	
Issued: December 4, 2001	§	
	§	Attorney Docket No.: 47015.115
Title: DISPLAY METHOD FOR	§	Customer No.: 27683
SELECTIVELY ROTATING	§	Real Party in Interest: Rackspace
WINDOWS ON A	§	Hosting, Inc.
COMPUTER DISPLAY		

**PETITION FOR INTER PARTES REVIEW**

Mail Stop Patent Board  
Patent Trial and Appeal Board  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the provisions of 35 U.S.C. §§ 311-319, Rackspace Hosting, Inc. (“Petitioner”) hereby petitions the Patent Trial and Appeal Board to institute an *inter partes* review of claims 1-18 (all claims) of United States Patent No. 6,326,978 (“the ’978 Patent,” Exhibit RACK-1001) that issued on December 4, 2001, to Steven John Robbins, resulting from U.S. Patent Application No. 09/295,164, filed on April 20, 1999. According to USPTO records, the ’978 Patent is currently assigned to Rotatable Technologies LLC.

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**I. Mandatory Notices**

**A. Real Party-in-Interest**

The real party-in-interest is Rackspace Hosting, Inc.

**B. Related Matters**

As of the filing date of this petition, the '978 patent was asserted against the party-in-interest in *Rotatable Tech., LLC v. Petroleum Geo-Services, Inc.*, 2:13-cv-00177 (E.D. Tex.). This proceeding also has bearing on the following district court actions:

- *Rotatable Tech., LLC v. Acer Am. Corp.*, 2:12-cv-00263 (E.D. Tex.)
- *Rotatable Tech., LLC v. Nokia Inc.*, 2:12-cv-00265 (E.D. Tex.)
- *Rotatable Tech., LLC v. Apple Inc.*, 2:12-cv-00292 (E.D. Tex.)
- *Rotatable Tech., LLC v. HTC Am., Inc.*, 2:12-cv-00718 (E.D. Tex.)
- *Rotatable Tech., LLC v. Citgo Petroleum Corp.*, 2:13-cv-00108 (E.D. Tex.)
- *Rotatable Tech., LLC v. Fossil Inc.*, 2:13-cv-00109 (E.D. Tex.)
- *Rotatable Tech., LLC v. Lennox Indus., LLC*, 2:13-cv-00110 (E.D. Tex.)
- *Rotatable Tech., LLC v. The Variable Annuity Life Insur. Co.*, 2:13-cv-00111 (E.D. Tex.)
- *Rotatable Tech., LLC v. Burns & McDonnell, Inc.*, 2:13-cv-00215 (E.D. Tex.)
- *Rotatable Tech., LLC v. Blastro, Inc.*, 2:13-cv-00262 (E.D. Tex.)

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### **II. Grounds for Standing**

Petitioner certifies that it is not estopped or barred from requesting *inter partes* review of the '978 Patent. Petitioner was served with a complaint asserting infringement of the '978 patent on February 25, 2013, which is less than one year before the filing of this Petition. Petitioner has not initiated a civil action challenging validity of any claim of the '978 patent. Petitioner also certifies that the '978 patent is eligible for *inter partes* review.

### **III. Relief Requested**

Petitioner asks that the Board review the accompanying prior art and analysis, institute a trial for *inter partes* review of claims 1-18 (all claims) of the '978 Patent, and cancel those claims as invalid.

#### **IV. The Reasons for the Requested Relief**

The full statement of the reasons for the relief requested is as follows:

##### **A. Summary of Reasons**

The '978 Patent relates to a system for selectively rotating a window displayed in a graphical user interface. In general, the '978 Patent describes a computer display window that is defined by a frame that surrounds a display portion. The computer display window is selectively rotated about a rotation point at the discretion of a user such that the plane of the window, the plane of rotation, and the rotation point are coplanar. These features were all well known in the prior art in 1999 when the application that issued as the '978 patent was filed.

The references cited in this petition, alone or in combination, either anticipate or render obvious the claims of the '978 patent. For example, U.S. Patent No. 6,137,468 to Martinez et al. discloses computer display windows that rotate at the discretion of a user. Martinez's windows are rotated based on sensors located in the device that detect a physical rotation of the device. U.S. Patent No. 5,345,543 to Capps et al. is provided to supplement the teachings of Martinez to show a user selecting a rotation point on the computer display to rotate the computer display window.

Further, U.S. Patent No. 6,327,393 to Bruder discloses a computer display window defined by a frame that surrounds a display portion. The computer display window includes rotation points that can be selected by the user. Once the rotation

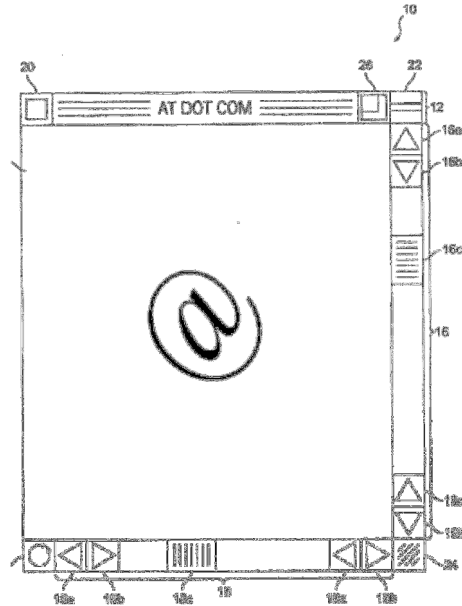
point is selected, the computer display window rotates about the selected rotation point at the discretion of the user.

Consequently, this petition demonstrates that claims 1-18 simply claim features that were well known in the prior art and are therefore, are either anticipated by or rendered obvious over the references presented in this petition.

## **B. The '978 Patent**

### **1. Overview**

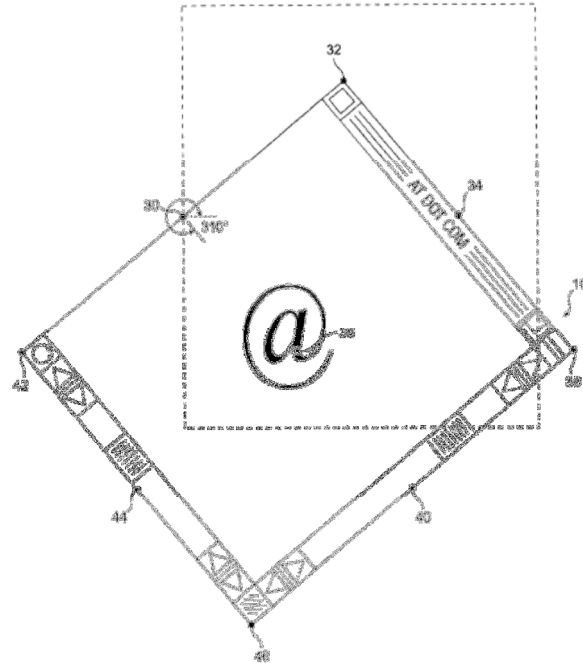
The '978 Patent has three independent claims (claims 1, 9, and 14) and a total of 18 claims. Each of the independent claims is directed to rotating a computer display window. The computer display window includes a display portion and a frame that surrounds the display portion. The computer display window is “generated by a program running on the computer such as the operating system or an application program. One of ordinary skill in the art will realize that the window 10 may take any one of a number of configurations containing any one of a number of elements.” (RACK-1001, 2:59-64.)



(RACK-1001, Fig. 1.) The specification admits that computer display windows were known in the art. According to the Background section, “[t]ypically, a window consists of at least a frame and a display portion surrounded by the frame. The frame is usually a rectangle or a square having a header at the top and three sides.” (RACK-1001, 1:34-37.)

The claimed computer display window is rotated about a rotation point at the discretion of a user. According to the specification, the computer display window is rotated by clicking and holding a rotation button. (*See* RACK-1001, 3:46-49.) As shown in figure 2, rotation occurs about one of several possible “rotation points” that can be selected by a user.





(RACK-1001, Fig. 2.) In figure 2, “the rotation point has been selected as point 30 which is located at the midpoint of the left frame. Eight other potential rotation points are shown as points 32, 34, 36, 38, 40, 42, 44, and 46.” (RACK-1001, 4:23-26.)

Once a rotation point is selected, the computer display window is rotated about the selected rotation point such that the plane of the window, the plane of rotation, and the rotation point are coplanar. The coplanarity of the computer display window’s rotation about the rotation point is shown in figure 2, above, with the “home orientation [] shown in phantom for reference purposes.” (RACK-1001, 4:21-22.)

None of these features were novel and nonobvious when the application that issued as the ’978 patent was filed on April 20, 1999.

## **2. Prosecution History**

The '978 Patent issued on December 4, 2001, from U.S. Patent Application No. 09/295,164 (“the '164 application”) filed by Steven John Robbins on April 20, 1999. Robbins also prosecuted the '164 application.

The first Office Action rejected all of the claims under 35 U.S.C. § 103(a) over either Horvitz or Horvitz in view of Kreegar. In response, Robbins filed an amendment to the claims and added “wherein the plane of the window, the plane of rotation, and the rotation point are coplanar” as a limitation to each of the independent claims. This limitation was added to overcome the Horvitz reference that taught rotating of windows in a three-dimensional way.

In the Final Office Action the claims were again rejected under 35 U.S.C. § 103(a) over either Horvitz in view of Jensen or Horvitz in view of Jensen, further in view of Kreegar. After Robbins filed an Appeal Brief, the Examiner allowed the claims.

The Kreegar reference is the only reference cited in this petition that was applied during prosecution of the '978 patent.

### **C. Identification of Challenges**

#### **1. Challenged Claims**

Claims 1-18 of the '978 Patent are challenged in this petition.

#### **2. Statutory Grounds for Challenges**

**Challenge #1:** Claims 1-4, 6-9, 11-14, 16, and 18 are obvious under 35

U.S.C. § 103(a) over U.S. Patent No. 6,137,468 to Martinez et al. (“Martinez”) in view of U.S. Patent No. 5,345,543 to Capps et al. (“Capps”). Martinez is an issued patent filed October 15, 1996, and is prior art under 35 U.S.C. § 102(e). Capps is an issued patent filed November 16, 1992, and is prior art under 35 U.S.C. § 102(b).

**Challenge #2:** Claims 5, 10, 15, and 17 are obvious under 35 U.S.C. § 103(a) over Martinez in view of Capps, further in view of Adobe Photoshop 5.0 User Guide (“Photoshop”). Photoshop is a printed publication with a publication date of May 12, 1998,<sup>1</sup> and is prior art under 35 U.S.C. § 102(a).

**Challenge #3:** Claims 1, 2, 4, 6, 7, 9, 10, 13-15 and 18 are anticipated under 35 U.S.C. § 102(e) by U.S. Patent No. 6,327,393 to Bruder (“Bruder”). Bruder is an issued patent filed August 17, 1998, and is prior art under 35 U.S.C. § 102(e).

**Challenge #4:** Claims 3, 11, and 16 are obvious under 35 U.S.C. § 103(a) over Bruder in view of U.S. Patent No. 5,045,844 to Takano et al. (“Takano”). Takano is an issued patent filed October 27, 1988, and is prior art under 35 U.S.C. § 102(b).

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<sup>1</sup> Adobe Photoshop 5.0 User Guide has a copyright date of 1998, (RACK-1008, pg. ii). It was publicly available when it was released with Adobe Photoshop 5.0 in May of 1998. (Ex. RACK-1010 (The Adobe Photoshop 5.0 User Guide “comes with Photoshop.” (See RACK-1011, pg. 1).)

**Challenge #5:** Claims 8, 12, and 17 are obvious under 35 U.S.C. § 103(a) over Bruder in view of U.S. Patent No. 5,396,590 to Kreegar (“Kreegar”). Kreegar is an issued patent filed September 17, 1992, and is prior art under 35 U.S.C. § 102(b).

**Challenge #6:** Claim 5 is obvious under 35 U.S.C. § 103(a) over Bruder in view of Photoshop.

### **3. Claim Construction**

This petition presents claim analysis in a manner that is consistent with the broadest reasonable interpretation in light of the specification. *See* 37 C.F.R. § 42.100(b). Claim terms are given their ordinary and accustomed meaning as would be understood by one of ordinary skill in the art, unless the inventor, as a lexicographer, has set forth a special meaning for a term. *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998); *York Prods., Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572 (Fed. Cir. 1996).

In the '978 Patent, the inventor did not act as a lexicographer and did not provide a special meaning for any of the claim terms. Accordingly, using the broadest reasonable interpretation standard, the terms should be given their ordinary and custom meaning as understood by a person of ordinary skill in the art:

- “*computer display window*”: a window generated by an operating system or an application program. (RACK-1009, ¶31.) One example of a computer display

window is generated by an operating system is a file explorer window. (*Id.* at ¶32.) One example of a computer display window generated by an application program is a bounding box used by an application to manipulate graphical objects. (*Id.* at ¶32.)

- “*display portion*”: an interior portion of a computer display window. (*Id.* at ¶34.)
- “*frame*”: the portion of the computer display window that surrounds the display portion. (*Id.* at ¶36.)
- “*rotation point*”: a point about which a window rotates. (*Id.* at ¶38.)
- “*selectively rotating*”: rotating by an amount selected by a user. (*Id.* at ¶41.) An example of selectively rotating is a user dragging a mouse to rotate a selected window to a particular orientation. (*Id.* at ¶42.)
- “*the plane of the window, the plane of rotation, and the rotation point are coplanar*”: the plane of the window, the plane of rotation, and the plane of the rotation point are all the same plane. (*Id.* at ¶46.)
- “*rotation button*”: a selectable item that a user may interact with to cause rotation. (*Id.* at ¶49.)
- “*toggling the window between two preselected orientations*”: switching the window from one preselected orientation to another preselected orientation. (*Id.* at ¶52.)

- “means for [selectively] rotating the window about a rotation point at the discretion of the user”:
  - Function: [selectively] rotating the window about a rotation point at the discretion of the user. (*Id.* at ¶54.)
  - Structure: a rotation button, (RACK-1001, 3:57-59); menu commands, (*id.* at 3:65-66); key strokes, (*id.* at 3:66-67); or a rotation cursor that appears over a designated portion of the frame, (*id.* at 4:1-4). (RACK-1009, ¶57.)
- “means for determining a rotation point”:
  - Function: determining a rotation point. (*Id.* at ¶59.)
  - Structure: a mouse or similar input device. (*Id.* at ¶60.)
- “means for selecting the rotation point”:
  - Function: selecting a rotation point. (*Id.* at ¶67.)
  - Structure: a mouse or similar input device. (*Id.* at ¶68.)
- “means for clicking and holding the window while dragging the window to the selected orientation”:
  - Function: clicking and holding the window while dragging the window to the selected orientation. (*Id.* at ¶75.)
  - Structure: a mouse or similar input device (*Id.* at ¶¶ 76, 79.)
- “means for rotating the window by predetermined increments”:

- Function: rotating the window by predetermined increments. (*Id.* at ¶¶81.)
- Structure: a rotation button, (RACK-1001, 3:57-59); menu commands, (*id.* at 3:65-66); key strokes, (*id.* at 3:66-67); or a rotation cursor that appears over a designated portion of the frame, (*id.* at 4:1-4). (RACK-1009, ¶¶ 82, 84.)
- “*means for toggling the window between two preselected orientations*”:
  - Function: toggling the window from one preselected orientation to another. (*Id.* at ¶ 86.)
  - Structure: a rotation button, (RACK-1001, 3:57-59); menu commands, (*id.* at 3:65-66); key strokes, (*id.* at 3:66-67); or a rotation cursor that appears over a designated portion of the frame, (*id.* at 4:1-4). (RACK-1009, ¶¶ 87, 89.)
- “*means for returning the window to a zero degree orientation*”:
  - Function: returning the window to a zero degree orientation. (*Id.* at ¶¶91.)
  - Structure: a rotation button, (RACK-1001, 3:57-59); menu commands, (*id.* at 3:65-66); key strokes, (*id.* at 3:66-67); or a rotation cursor that appears over a designated portion of the frame, (*id.* at 4:1-4). (RACK-1009, ¶¶ 92, 94.)

The foregoing proposed claim construction is presented by Petitioner using the broadest reasonable interpretation standard applied for purposes of *inter partes*

review. Petitioner reserves the right to advocate a different claim interpretation in district court or any other forum in accordance with the claim construction standards applied in such forum.

**4. Identification of How the Claims Are Unpatentable**

**i. Challenge #1: Claims 1-4, 6-9, 11-14, 16, and 18 are obvious over Martinez in view of Capps.**

Claims 1-4, 6-9, 11-14, 16, and 18 are obvious under 35 U.S.C. § 103(a) over U.S. Patent No. 6,137,468 to Martinez et al. (“Martinez”) in view of U.S. Patent No. 5,345,543 to Capps et al. (“Capps”). Martinez (RACK-1006) issued from U.S. Patent Application No. 08/730,593, filed October 15, 1996, and is prior art under 35 U.S.C. § 102(e). Capps (RACK-1007) issued from U.S. Patent Application No. 07/977,145, filed November 16, 1992, and is prior art under 35 U.S.C. § 102(b). Martinez in view of Capps is presented to supplement the teachings of Martinez with respect to at least a means for selectively rotating windows at the discretion of a user.

Martinez teaches a portable computing device that rotates windows displayed on the screen in response to a user rotating either the device or a connected peripheral device. (RACK-1009, ¶96.) The windows in Martinez are created by the operating system and include a frame and a display portion. (*Id.*) Further, in Martinez, the plane of the window, the plane of rotation, and the rotation point are coplanar. (*Id.*) Martinez, however, does not disclose a “means for



selectively rotating the window about a rotation point at the discretion of the user,” as claimed because Martinez rotates windows based on rotation of a device, (RACK-1006, 3:19-23), which is not a “means for” described in the ’978 patent. (RACK-1009, p.38 cl.[1.3].) Capps, therefore, is provided to supplement the teachings of Martinez with respect to at least a means for selectively rotating a window that includes selecting a window’s rotation point and performing a dragging motion. (*Id.*)

*Reasons to Combine:* It would have been obvious to combine the prior art elements of a window that rotates based on a rotation of a device (e.g., the system in Martinez) with a means for rotating the windows based on a user selection and dragging motion (e.g., the system of Capps). (RACK-1009, ¶95.) This combination amounts to use of a known technique to improve a similar device in the same way. *See* M.P.E.P. § 2143(C).

Martinez teaches rotating graphical objects, including windows generated by an operating system, (RACK-1006, 2:24-26, 4:50-58, 7:17-20), by rotating a pointing device (e.g., mouse) that has additional sensors to track rotation (RACK-1006, 3:19-23.) Capps also teaches rotating graphic objects through use of a pointing device, (RACK-1007, 3:42-52), but further adds the feature of rotating graphical objects by a user selecting a rotation point associated with the object and dragging the pointing device to cause the rotation, (RACK-1007, 5:37-63).

Adding the feature of rotating a window based on a user selecting a rotation point and dragging the pointing device, as taught in Capps, to a system that rotates a window by rotating the pointing device, as taught in Martinez, combines the known technique of selecting and dragging the pointing device of Capps to improve the system in Martinez in the same way. A person of ordinary skill in the art would have looked to this combination because both Martinez and Capps teach similar systems that rotate graphical objects, including computer display windows, based on movement of a pointing device. Adding Capps's known method of selecting and dragging to rotate to Martinez would have been in the grasp of a programmer and would easily have been recognized as a way to improve control of graphical object rotation. (RACK-1009, ¶98.)

### **Claim 1**

#### **[1.0] A *computer display window comprising***

Martinez discloses “a computer display window” because it teaches “windows 500 and 502” and “window 600”<sup>2</sup> that are generated by an operating system on a “laptop computer 300.” (RACK-1009, p.36 cl.[1.0]; RACK-1006, 4:51-53.) Thus, each of window 500, window 502, and window 600 on the laptop

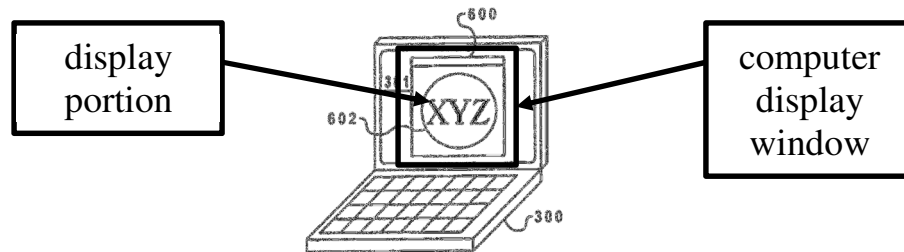
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<sup>2</sup> A person of ordinary skill in the art would recognize that the elements of window 600 of Fig. 6 and windows 500 and 502 of Fig. 5 are interchangeable for purposes of the teachings of Martinez. (RACK-1009, p.36 cl.[1.0].)

computer discloses “a computer display window” as recited in the claim. (RACK-1009, p.36 cl.[1.0].)

**[1.1] *a display portion***

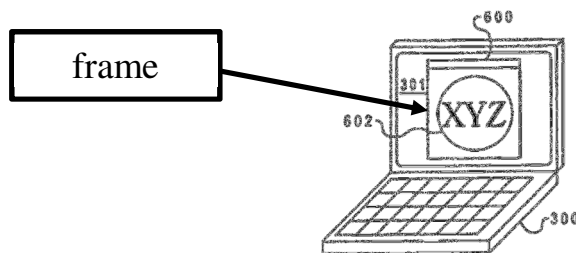
Martinez discloses “a display portion” because it teaches displaying the letters “X,” “Y,” and “Z” in a computer display window:



(RACK-1009, p.37 cl.[1.1]; RACK-1006, 4:61-65; RACK-1006, Fig. 6A.) Thus, the laptop computer having a window that displays letters discloses “a display portion” as recited in the claim. (RACK-1009, p.37 cl.[1.1].)

**[1.2] *a frame surrounding the display portion***

Martinez discloses “a frame surrounding the display portion” because it teaches a border that surrounds the display portion, as depicted in Fig. 6A:



(RACK-1009, p.38 cl.[1.2]; RACK-1006, Fig. 6A.) Thus, the laptop computer having a computer display window with a display portion that is bounded by a

border discloses “a frame surrounding the display portion” as recited in the claim.

(RACK-1009, p.38 cl.[1.2].)

**[1.3] *means for selectively rotating the window about a rotation point at the discretion of the user***

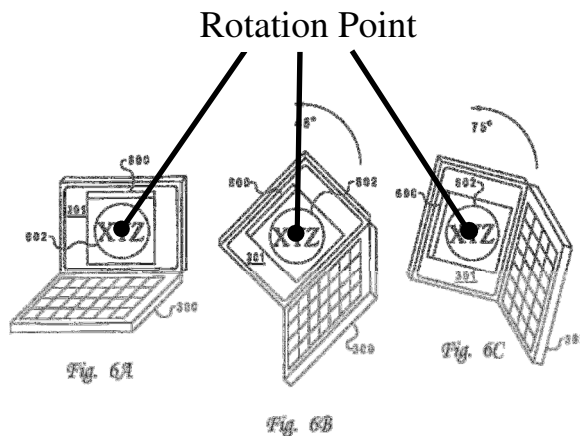
Martinez discloses using “sensors” to detect when a user decides to rotate the laptop, and based on the output of the sensors as the user rotates the laptop, the display window would be rotated. (RACK-1006, 4:17-26, 5:52-55 (“A determination is then made as to whether the windows are to be rotated . . . If the windows are to be rotated . . . , the system coordinate table is updated with the results.”); RACK-1009, p.38 cl.[1.3].)

The sensors used in Martinez are not one of the “means for” structures described in the ’978 Patent. (*Id.*) Capps, however, teaches structures for rotating a graphical object on a computer display that correspond to the “means for” selectively rotating as defined in the ’978 Patent (selecting a rotation point, clicking a rotation button, menu commands, key strokes, or a rotation cursor). (*Id.*) For example, Capps states that rotating a graphical object via a menu command or a key stroke was well known in the prior art. (*Id.*; RACK-1007, 1:20-33.) Capps also teaches clicking a rotation button in the form of a “hand crank” that is clicked and rotated. (RACK-1009, p.38 cl.[1.3]; RACK-1007, 6:6-17 (“Thus, to rotate an object about its center of gravity, the crank 62 is dragged to a position such that the crank axle 65 is placed over the object’s gravity point G’.”).)

Thus, the rotatable computer display window of Martinez that can be selectively rotated at the discretion of the user in view of the specific means for selectively rotating a window disclosed in Capps discloses a “means for selectively rotating the window about a rotation point at the discretion of the user,” as claimed. (RACK-1009, p.38 cl.[1.3].)

[1.4] *wherein the plane of the window, the plane of rotation, and the rotation point are coplanar*

Martinez discloses “wherein the plane of the window, the plane of rotation, and the rotation point are coplanar” because the plane of the window is the X-Y plane, the plane of rotation is the X-Y plane, and the rotation point is in the X-Y plane. (RACK-1009, p.41 cl.[1.4]):



(*Id.*)

Accordingly, because Martinez disclose that the plane of the window, the plane of rotation, and the rotation point are all in the same plane (e.g., the X-Y plane), then Martinez disclose “wherein the plane of the window, the plane of rotation, and the rotation point are coplanar,” as claimed. (*Id.*)

## **Claim 2**

**[2.0] *The window according to claim 1, wherein the means for selectively rotating comprises a rotation button.***

Capps discloses “the means for selectively rotating comprises a rotation button” because Capps teaches a “means for” that is a rotation button. (*Id.* at p.41 cl.[2.0].) In Capps, a user can perform the function of selectively rotating by clicking a “hand crank” icon to rotate a window at a rotation point. (*Id.*; RACK-1007, 5:7-14.) Icon 62 of FIG. 3 is a “graphical representation of a hand crank” that is used “to rotate an object about its center of gravity.” (RACK-1009, p.41 cl.[2.0]; RACK-1007, 6:6-17.) The “hand crank” icon is a rotation button because it is a symbol displayed on the screen with which the user uses to rotate the object. (RACK-1009, p.41 cl.[2.0].) Accordingly, the “hand crank” icon that is used by a user to rotate an object discloses wherein the means for selectively rotating comprises a rotation button, as recited in the claim. (*Id.*)

## **Claim 3**

**[3.0] *The window according to claim 1, wherein the means for selectively rotating comprises a menu command.***

Capps discloses “the means for selectively rotating comprises a menu command” because Capps teaches that a menu command may be used as a “means for” selective rotating graphical objects. (*Id.* at p.42 cl.[3.0].) For example, in its Background section, Capps states that “some applications require that the user

choose the desired scaling or rotation function from a menu” (*Id.*; RACK-1007, 1:20-33.) A selectable “function from a menu” is a menu command. (RACK-1009, p.42 cl.[3.0].) Accordingly, a selectable function from a menu to rotate an object based on the user’s choice discloses “the means for selectively rotating comprises a menu command,” as recited in the claim. (*Id.*)

#### **Claim 4**

**[4.0] *The window according to claim 1, wherein the means for selectively rotating comprises a key stroke.***

Capps discloses “the means for selectively rotating comprises a key stroke” because Capps teaches that a key stroke may be used as a “means for” selective rotating graphical objects. (*Id.* at p.43 cl.[4.0].) For example, in its Background section, Capps states that “a user may wish to rotate or scale (size) an image. Commonly, these functions are accomplished by selecting the items to be manipulated and then entering a suitable keyboard command that indicates the angle by which the image should be rotated.” (*Id.*; RACK-1007, 1:20-33.) Thus, the suitable keyboard command to indicate the angle by which an image should be rotated discloses “the means for selectively rotating comprises a key stroke,” as recited in the claim. (RACK-1009, p.43 cl.[4.0].)

#### **Claim 6**

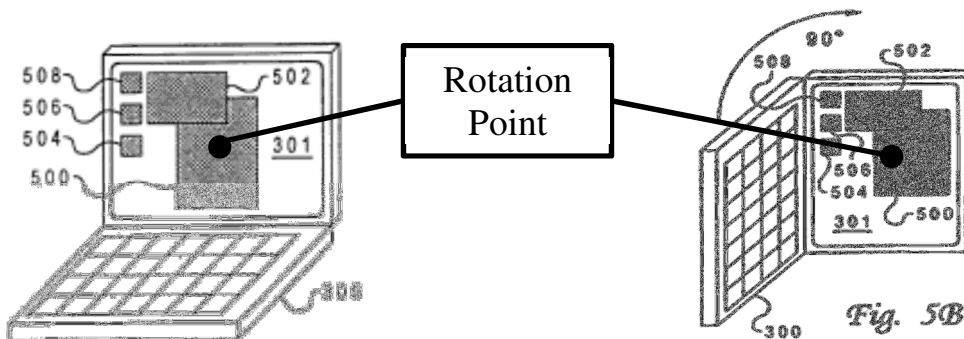
**[6.0] *The window according to claim 1, further comprising means for selecting the rotation point.***

Capps discloses a “means for selecting the rotation point” because Capps teaches that a user can use any pointing device, such as a computer mouse, track ball, or a pen-based tablet, to select and drag a “gravity point” to rotate an object. (*Id.* at p.44 cl.[6.0]; RACK-1007, 3:43-47, 6:6-17.) Accordingly, the pointing devices of Capps, which includes a computer mouse, that a user uses to select a gravity point discloses a “means for selecting the rotation point,” as claimed. (RACK-1009, p.44 cl.[6.0].)

### **Claim 7**

[7.0] *The window according to claim 1, wherein the rotation point is within or on the window.*

Martinez discloses that the rotation point is within or on the window. In Figs. 5A-B, the rotation point is the center point of laptop’s display 301. (*Id.* at p.45 cl.[7.0].) Fig. 5A shows the laptop at a zero degree orientation and Fig. 5B shows the laptop rotated clockwise about the center point by 90 degrees, with window 500 (in the middle of the display) rotated counter-clockwise to counter-act the 90 degree rotation of the laptop:





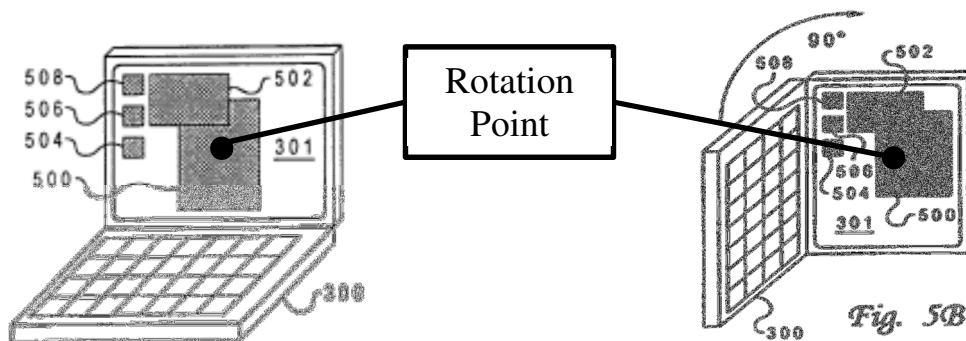
(*Id.*; RACK-1006, Fig. 5A-B (annotated).)

In each of Figs. 5A-B, the rotation point is located at the center of the display which is on or within window 500, since window 500 overlaps the middle of the display 301. (RACK-1009, p.45 cl.[7.0].) Thus, Martinez discloses “wherein the rotation point is within or on the window,” as recited in the claim. (*Id.*)

### **Claim 8**

[8.0] *The window according to claim 1, wherein the rotation point is outside the window*

Martinez discloses that the rotation point is outside the window. In Figs. 5A-B, the rotation point is the center point of laptop’s display 301. (*Id.* at p.46 cl.[8.0].) Fig. 5A shows the laptop at a zero degree orientation and Fig. 5B shows the laptop rotated clockwise about the center point by 90 degrees, with window 502 located on an edge of the display rotated counter-clockwise to counter-act the 90 degree rotation:



(*Id.*; RACK-1006, Fig. 5A-B (annotated).)

In each of Figs. 5A-B, the rotation point is in the center of the display which is outside window 502, since window 502 does not overlap the middle of the display 301. (RACK-1009, p.46 cl.[8.0].) Thus, Martinez discloses “wherein the rotation point is outside the window,” as claimed. (*Id.*)

### **Claim 9**

[9.0] *A method of selectively rotating a computer display window having a display portion and a frame surrounding the display portion, the method comprising the steps of:*

Martinez teaches a method of selectively rotating a computer display window because it discloses a process for rotating windows on a device to a user selected orientation. (*Id.* at p.47 cl.[9.0]; *see, e.g.*, RACK-1006, Fig. 8.) “As the device is rotated clockwise or counterclockwise, the present invention maintains the windows level with respect to a preselected reference plane. Alternatively, the contents within the windows may be maintained level relative to the plane in response to rotation of the data processing system.” (RACK-1006, 5:40-47.)

To the extent that the preamble limits the claims, the limitations of a “computer display window having a display portion and a frame surrounding the display portion” are substantially similar to limitations already addressed in claim limitations [1.0]-[1.2]. (RACK-1009, p.47 cl.[9.0].) For the same reasons as set forth above, these limitations are taught by the prior art. (*Id.*)

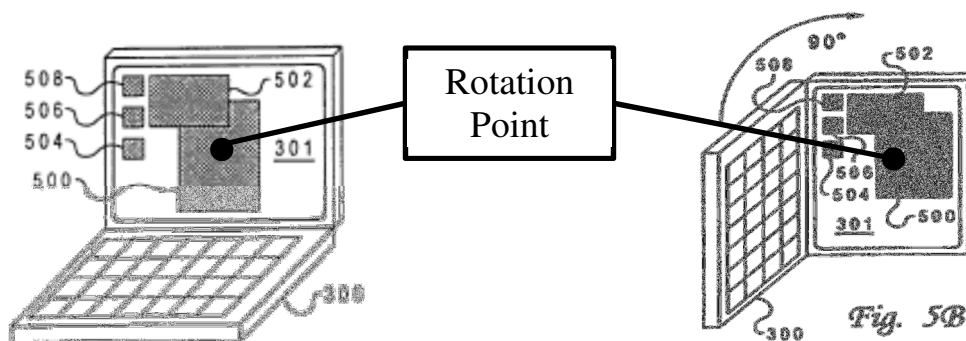
[9.1] *determining a rotation point*

Capps teaches the step of “determining a rotation point” because it discloses that a “center of gravity” point is a “natural center point for rotation.” (*Id.* at p.48 cl.[9.1].) The gravity points “can be calculated using fairly straightforward heuristics.” (*Id.*; RACK-1007, 5:37-48.) Further, Capps discloses that the user determines the rotation point by selecting a desired rotation point using an input device. (RACK-1009, p.48 cl.[9.1]; RACK-1007, 6:6-17.)

Accordingly, calculating a gravity point for rotation using straightforward heuristics, or a user selecting a rotation point using an input device discloses “determining a rotation point,” as recited in the claim. (RACK-1009, p.48 cl.[9.1].)

[9.2] ***rotating the window about the rotation point at the discretion of the user***

Martinez discloses “rotating the window about the rotation point at the discretion of the user” because, as the user changes the laptop’s attitude, the window rotates about the rotation point. (*Id.* at p.49 cl.[9.2]; RACK-1006, 4:59-5:6.) For example, Fig. 5A shows the laptop at a zero degree orientation and Fig. 5B shows the laptop rotated clockwise about the center point by 90 degrees, with window 502 rotated counter-clockwise to counter-act the 90 degree rotation:



(RACK-1009, p.49 cl.[9.2]; RACK-1006, Fig. 5A-B (annotated).)

Thus, rotating a window about a rotation point as a user rotates a laptop discloses rotating the window about the rotation point at the discretion of the user, as recited in the claim. (RACK-1009, p.49 cl.[9.2].)

**[9.3] *wherein the plane of the window, the plane of rotation, and the rotation point are coplanar***

This limitation is identical to the language contained in claim limitation [1.4], and for the same reasons as set forth above, this limitation is taught by the prior art. (RACK-1009, p.50 cl.[9.3].)

### **Claim 11**

**[11.0] *The method according to claim 9, wherein the step of rotating comprises the step of rotating the window by predetermined increments***

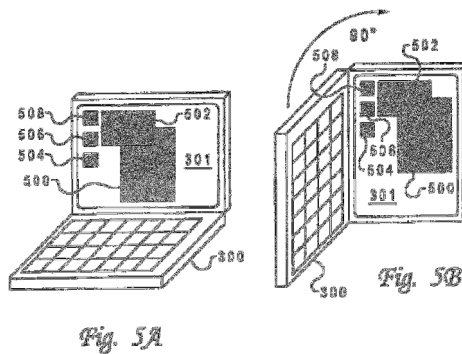
Martinez teaches “the step of rotating comprises the step of rotating the window by predetermined increments” because it discloses that a user “can change the display from a ‘landscape’ mode to a ‘portrait’ mode by simply rotating the display 90° either way around one axis.” (*Id.* at p.50 cl.[11.0]; RACK-1006, 4:41-49.) Martinez also teaches that the window may be rotated by “degree increments rang[ing] from -179 to +179 in the X axis and -179 to +179 in the Y axis.” (RACK-1009, p.50 cl.[11.0]; RACK-1006, 5:34-39.)

Accordingly, rotating from landscape to portrait and by degree increments discloses “wherein the step of rotating comprises the step of rotating the window by predetermined increments,” as claimed. (RACK-1009, p.50 cl.[11.0].)

### **Claim 12**

[12.0] *The method according to claim 9, wherein the step of rotating comprises the step of toggling the window between two preselected orientations*

Martinez teaches “the step of rotating comprises the step of toggling the window between two preselected orientations” because it discloses that a user “can change the display from a ‘landscape’ mode to a ‘portrait’ mode by rotating the display 90° either way around one axis.” (*Id.* at p.51 cl.[12.0]; RACK-1006, 4:41-49.) Figs. 5A-B show toggling between landscape and portrait orientations:



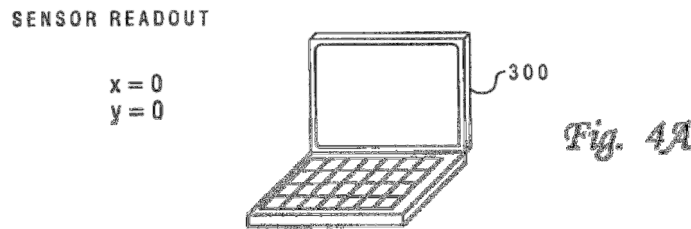
(RACK-1009, p.51 cl.[12.0]; RACK-1006, Figs. 5A-B.)

Accordingly, toggling between landscape mode and portrait mode discloses “the step of rotating comprises the step of toggling the window between two preselected orientations,” as claimed. (RACK-1009, p.51 cl.[12.0].)

### **Claim 13**

[13.0] *The method according to claim 9, wherein the step of rotating comprises the step of returning the window to a zero degree orientation*

Martinez teaches “the step of rotating comprises the step of returning the window to a zero degree orientation” because it discloses that a user “can change the display from a ‘landscape’ mode to a ‘portrait’ mode by simply rotating the display 90° either way around one axis.” (*Id.* at p.52 cl.[13.0]; RACK-1006, 4:41-49.) When the device is returned to landscape mode, the attitude is “ $X=0^\circ$  and  $Y=0^\circ$ .” (RACK-1009, p.52 cl.[13.0]; RACK-1006, 4:27-31.). Fig. 4A demonstrates returning the window to a zero degree orientation:



(RACK-1009, p.52 cl.[13.0]; RACK-1006, Fig. 4.)

Accordingly, when rotating the screen from portrait mode to landscape mode will return the window to an orientation with  $X=0^\circ$  and  $Y=0^\circ$ ”, thereby disclosing “the step of rotating comprises the step of returning the window to a zero degree orientation,” as claimed. (RACK-1009, p.52 cl.[13.0].)

#### **Claim 14**

[14.0] *A system for selectively rotating a computer display window having a display portion and a frame surrounding the display portion, the system comprising*

Martinez teaches a system for selectively rotating a computer display window because it discloses a device for rotating windows to an orientation selected by the user. (*Id.* at p.53 cl.[14.0]; *see, e.g.*, RACK-1006, Fig. 8.) “As the device is rotated clockwise or counterclockwise, the present invention maintains the windows level with respect to a preselected reference plane. Alternatively, the contents within the windows may be maintained level relative to the plane in response to rotation of the data processing system.” (RACK-1006, 5:40-47.)

To the extent that the preamble limits the claims, the limitations of a “computer display window having a display portion and a frame surrounding the display portion” are substantially similar to limitations already addressed in claim limitations [1.0]-[1.2]. (RACK-1009, p.53 cl.[14.0].) For the same reasons as set forth above, these limitations are taught by the prior art. (*Id.*)

[14.1] ***means for determining a rotation point***

Capps discloses a “means for determining a rotation point” because Capps teaches that a user can use any pointing device, such as a computer mouse, track ball, or a pen-based tablet, to select and drag a “gravity point” to rotate an object. (*Id.* at p.54 cl.[14.1]; RACK-1007, 3:43-47, 6:6-17.) Accordingly, the pointing devices of Capps, which includes a computer mouse, that a user uses to select a gravity point discloses a “means for determining a rotation point,” as claimed. (RACK-1009, p.54 cl.[14.0].)

Accordingly, a computing system that uses straight-forward heuristics to determine a gravity point and an input device that enables a user to select a desired rotation point both disclose a “means for determining a rotation point.” (*Id.*)

[14.2] ***means for rotating the window about the rotation point at the discretion of the user***

This limitation is substantially similar to the language contained in claim [1.3], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.56 cl.[14.2].)

[14.3] ***wherein the plane of the window, the plane of rotation, and the rotation point are coplanar***

This limitation is identical to the language contained in claim limitation [1.4], and for the same reasons as set forth above, this limitation is taught by the prior art. (*Id.* at p.56 cl.[14.3].)

### **Claim 16**

[16.0] ***The system according to claim 14, wherein means for rotating comprises means for rotating the window by predetermined increments***

This limitation is substantially similar to the language contained in claim [11.0], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.56 cl.[16.0].)

The sensors used in Martinez are not one of the “means for” structures described in the ’978 Patent. (*Id.* at p.38 cl.[1.3].) Capps, however, discloses structures for rotating a graphical object by predetermined increments that



correspond to the “means for” rotating the window by predetermined increments as defined in the ‘978 Patent (selecting a rotation point, clicking a rotation button, menu commands, key strokes, or a rotation cursor). (*Id.*) For example, Capps state that a mouse or other input device can be used to rotate a selected object “once for every N (e.g., 5) rotations of the crank.” (*Id.* at p.56 cl.[16.0]; RACK-1007, 7:8-12, 3:42-52.)

Accordingly, a mouse or other input device that rotates an object once for every five (5) rotations discloses “means for rotating the window by predetermined increments,” as claimed. (RACK-1009, p.56 cl.[16.0].)

### **Claim 18**

**[18.0] *The system according to claim 14, wherein means for rotating comprises means for returning the window to a zero degree orientation***

This limitation is substantially similar to the language contained in claim [13.0], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.57 cl.[18.0].)

The sensors used in Martinez are not one of the “means for” structures described in the ‘978 Patent. (*Id.* at p.38 cl.[1.3].) Capps, however, discloses structures for rotating a graphical object by predetermined increments that correspond to the “means for” rotating the window by predetermined increments as defined in the ‘978 Patent (selecting a rotation point, clicking a rotation button, menu commands, key strokes, or a rotation cursor). (*Id.*) For example, Capps state

that a mouse or other input device can be used to rotate a selected object “once for every N (e.g., 5) rotations of the crank.” (*Id.* at p.57 cl.[18.0]; RACK-1007, 7:8-12, 3:42-52.) In other words, an object in Capps starts in a zero degree orientation, and the user can fully rotate an object back to its original zero degree orientation. (RACK-1009, p.57 cl.[18.0].)

Accordingly, a mouse or other input device that fully rotates an object discloses “means for returning the window to a zero degree orientation,” as claimed. (*Id.*)

**ii. Challenge #2: Claims 5, 10, 15, and 17 are obvious over Martinez in view of Capps, further in view of Photoshop.**

Claim 5, 10, 15, and 17 are obvious under 35 U.S.C. § 103(a) over Martinez in view of Capps, further in view of Adobe Photoshop 5.0 User Guide (“Photoshop”). Photoshop (RACK-1008) is a printed publication that was publicly available on May 12, 1998, and is prior art under at least 35 U.S.C. § 102(a). This combination is proposed to supplement the teachings of Martinez and Capps with respect to using a rotation cursor as a means for selectively rotating a window.

*Reasons to Combine:* It would have been obvious to combine the prior art elements of a window that can that can be rotated (e.g., the systems of Martinez and Capps) with a rotation cursor to provide feedback to the user (e.g., the system of Photoshop), because it would have been a use of known techniques to improve a similar device in the same way. (RACK-1009, ¶100); *see* M.P.E.P. § 2143(C).

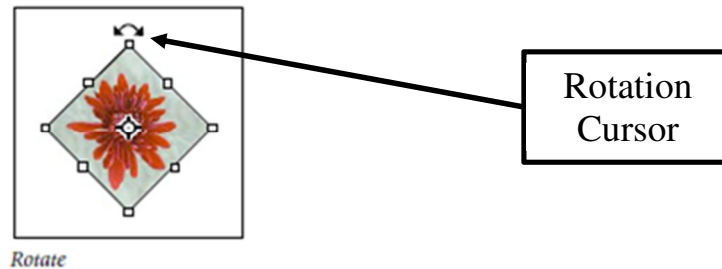
Adding features from Photoshop to improve the system in Martinez would have been obvious because such a combination would have used known techniques to improve a similar system (e.g., the system of Martinez and Capps) in the same way. (*Id.*) Martinez, Capps, and Photoshop each teach similar systems that rotate graphical objects based on user interaction. (*Id.*) Since Photoshop addresses the same problem of Martinez and Capps concerning rotation of objects, it would be common sense to a programmer to look to Photoshop for variations on ways for control of rotation, such as by using, for example, a rotation cursor. (*Id.*) Accordingly, a person of ordinary skill in the art would combine the known elements of Martinez and Photoshop because the combination would have used known techniques to improve a similar system in the same way. (*Id.*)

**Claim 5**

[5.0] *The window according to claim 1, wherein the means for selectively rotating comprises a rotation cursor*

Photoshop teaches “wherein the means for selectively rotating comprises a rotation cursor” because it discloses dragging a special “curved, two-sided arrow” cursor as the means for rotating:

- To rotate, move the pointer outside of the bounding border (it turns into a curved, two-sided arrow), and then drag. Press Shift to constrain the rotation to 15° increments.



(*Id.* at p.61 cl.[5.0]; RACK-1008 at 185.)

Accordingly, a curved, two-sided arrow cursor that is dragged to rotate an object discloses “wherein the means for selectively rotating comprises a rotation cursor,” as claimed. (RACK-1009, p.61 cl.[5.0].)

### **Claim 10**

[10.0] ***The method according to claim 9, wherein the step of rotating comprises the step of clicking and holding the window while dragging the window to the selected orientation***

Photoshop discloses “the step of rotating comprises the step of clicking and holding the window while dragging the window to the selected orientation” because it teaches that a user “clicks the title bar of the [ ] window” and then “drag[s] clockwise”. (*Id.* at p.61 cl.[10.0].) The “drag clockwise” disclosed in Photoshop describes holding the window while dragging the window. (*Id.*) Accordingly, the click, hold and drag of the window to rotate as taught in Adobe

discloses “the step of clicking and holding the window while dragging the window to the selected orientation,” as claimed. (*Id.*)

**Claim 15**

[15.0] *The system according to claim 14, wherein means for rotating comprises means for clicking and holding the window while dragging the window to the selected orientation*

This limitation is substantially similar to the language contained in claim [10.0], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.62 cl.[15.0].)

**Claim 17**

[17.0] *The system according to claim 14, wherein means for rotating comprises means for toggling the window between two preselected orientations*

Adobe teaches “means for rotating comprises means for toggling the window between two preselected orientations” because it teaches a user using an input device, a mouse, to toggle between two orientations contained in a history palette. (*Id.* at p.63 cl.[17.0]; RACK-1008 at 1, 168-69.) For example, the “history palette lets you jump to any recent state of the image . . . if you select, paint, and rotate part of an image, each of those states is listed separately in the palette. You can then select any of these states, and the image will revert to how it looked when that change was first applied.” (RACK-1009, p.63 cl.[17.0]; RACK-1008 at 168-

69.) The history palette can store multiple orientation states previously set by the user. (RACK-1009, p.63 cl.[17.0].)

Accordingly, history palette that (i) stores multiple orientation states and (ii) allows a user to switch between the stored orientation states by clicking on the palette with a mouse discloses “means for rotating comprises means for toggling the window between two preselected orientations,” as claimed. (*Id.*)

**iii. Challenge #3: Claims 1, 2, 4, 6, 7, 9, 10, 13-14, 15 and 18 are anticipated by Bruder.**

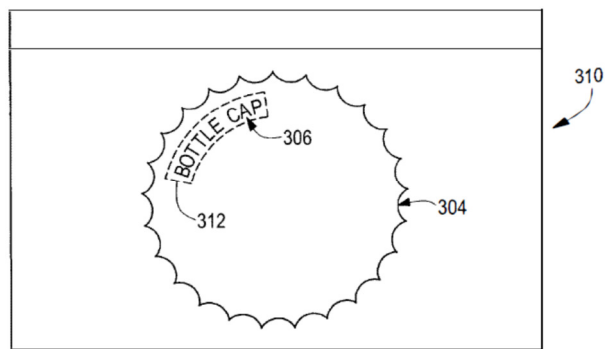
Claims 1, 2, 4, 6, 7, 9, 10, 13-14, 15 and 18 are anticipated by U.S. Patent No. 6,327,393 to Bruder (RACK-1003). Bruder issued from U.S. Patent Application No. 09/135,112, filed on August 17, 1998, and is prior art under 35 U.S.C. § 102(e). Bruder teaches a computer display window with a frame that surrounds a display portion. The frame includes rotation points that may be selected by a user in order to rotate the window about a selected rotation point. Windows in Bruder are rotated such that that the plane of the window, the plane of rotation, and the rotation point are coplanar.

**Claim 1**

**[1.0] *A computer display window comprising***

Bruder teaches “a computer display window” because it discloses “a deformable window.” (RACK-1009, p.66 cl.[1.0].) For example, Bruder discloses that “[o]nce identified, the region of interest 306 within the

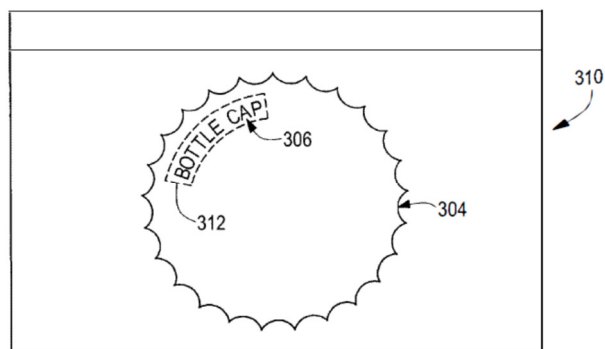
deformed window 312 is sufficiently characterized, as described hereinafter, to allow the region of interest within the deformable window to be input for further processing (212).” (*Id.*; RACK-1003, 4:41-47 (emphasis added).)



(RACK-1003, Fig. 3B.)

[1.1] *a display portion*

Bruder teaches “a display portion” because it teaches that each deformable window has a “region of interest” that can enclose lettering, such as “BOTTLE CAP.” (RACK-1009, p.66 cl.[1.1].) The region of interest is “within the deformable window.” (*Id.*; RACK-1003, 4:41-47.)

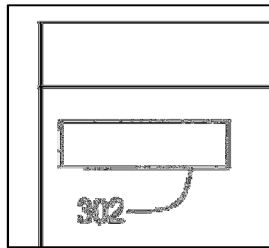


(RACK-1003, Fig. 3B.)

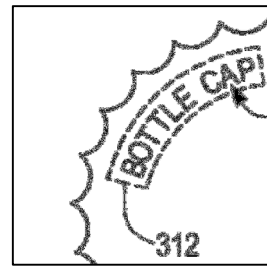
Accordingly, the region of interest, within the deformable window, that is used to display information, such as words, is “a display portion,” as claimed. (RACK-1009, p.66 cl.[1.1].)

**[1.2] *a frame surrounding the display portion***

Bruder discloses “a frame surrounding the display portion” because it discloses a border that surrounds the region of interest. (*Id.* at p.67 cl.[1.2].) As evidenced in Figs. 3A and 3B, deformable windows 302 and 312 include frames surrounding their respective “display portions.” (*Id.*)



(RACK-1003, Fig. 3A.)



(RACK-1003, Fig. 3B.)

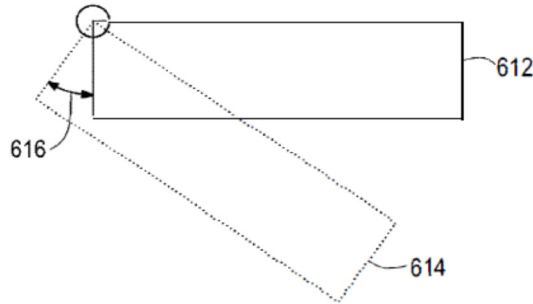
Accordingly, the border that surrounds the region of interest discloses “a frame surrounding the display portion,” as claimed. (RACK-1009, p.67 cl.[1.2].)

**[1.3] *means for selectively rotating the window about a rotation point at the discretion of the user***

Bruder discloses a “means for selectively rotating the window about a rotation point at the discretion of the user” because it discloses that a user can use a mouse to drag a corner of a window to cause the window to turn around the window’s center point. (*Id.* at p.67 cl.[1.3]; RACK-1003, 6:15-19.) “An example



of a rotation about the origin of the window is shown in FIG. 6B, which illustrates an initial window 612 translated clockwise by an angle 616 approximately equal to 10°. The deformed window 614 has a new angle relative to the x-axis of the image coordinate system.” (RACK-1003, 6:56-64.)



(RACK-1003, Fig. 6B.)

Accordingly, the user using a mouse to drag a corner of a window to a desired angle teaches a “means for selectively rotating the window about a rotation point at the discretion of the user,” as claimed. (RACK-1009, p.67 cl.[1.3].)

**[1.4] *wherein the plane of the window, the plane of rotation, and the rotation point are coplanar***

Bruder teaches “wherein the plane of the window, the plane of rotation, and the rotation point are coplanar” because the plane of the window is the X-Y plane, the plane of rotation is the X-Y plane, and the rotation point is in the X-Y plane. (*Id.* at p.68 cl.[1.4].) Because the plane of the window, the plane of rotation, and the rotation point are all in the same plane (e.g., the X-Y plane), then they are coplanar (*Id.*)

## **Claim 2**

**[2.0] *The window according to claim 1, wherein the means for selectively rotating comprises a rotation button***

Bruder teaches “wherein the means for selectively rotating comprises a rotation button” because it discloses a circle symbol that a user clicks on to rotate the deformable window. (*Id.* at p.69 cl.[2.0]; RACK-1003, 6:56-59 (“Turning to the circle symbol 504, if the user selects and drags the corner having the circle symbol 504, the window 500 will turn around a point of the window 500”).)

Accordingly, the circle symbol that the user clicks on to rotate the deformable window discloses “wherein the means for selectively rotating comprises a rotation button,” as claimed. (RACK-1009, p.69 cl.[2.0].)

**Claim 4**

**[4.0] *The window according to claim 1, wherein the means for selectively rotating comprises a key stroke***

Bruder teaches “wherein the means for selectively rotating comprises a key stroke” because it discloses that a user can use a keyboard to define parameters of a deformable window, such as its “angle” of rotation. (*Id.* at p.70 cl.[4.0]; RACK-1003, Fig. 12, 5:65-6:3 (“the user can indicate the deformations by increasing or decreasing variables using a keyboard”).)

Accordingly, using a keyboard to rotate the angle of rotation of a deformable window discloses “wherein the means for selectively rotating comprises a key stroke,” as claimed. (RACK-1009, p.70 cl.[4.0].)

**Claim 6**

**[6.0] *The window according to claim 1, further comprising means for selecting the rotation point***

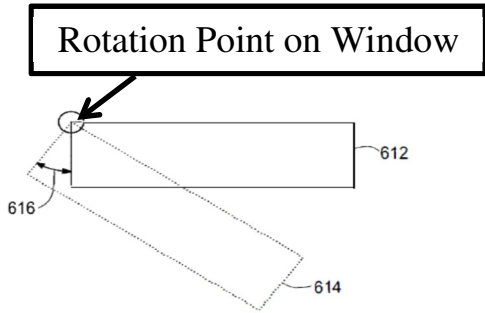
Bruder teaches “means for selecting the rotation point” because it discloses that “ $x_{input}$ ,  $y_{input}$ ” is “given by the pointing device as the user drags the corner [of the window].” (*Id.* at p.71 cl.[6.0]; RACK-1003, 7:7-8.) In Bruder, as the user uses the mouse to provide input, a mathematical algorithm uses the x,y input from the mouse to select and determine the rotation point. (RACK-1009, p.71 cl.[6.0].)

Accordingly, the mouse that provides the input to select and determine the rotation point discloses a “means for selecting the rotation point,” as claimed. (*Id.*)

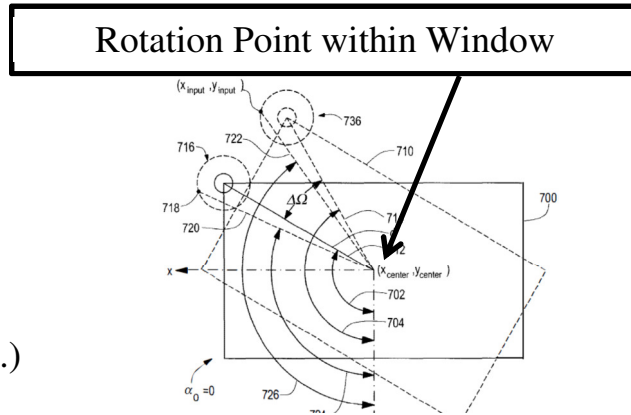
**Claim 7**

**[7.0] *The window according to claim 1, wherein the rotation point is within or on the window***

Bruder teaches “wherein the rotation point is within or on the window” because Bruder discloses that the rotation point can be within or on the window, such as the corner of a window, as shown in Fig. 6B, or the center of the window, as shown in Fig 7. (*Id.* at p.73 cl.[7.0]; RACK-1003, 6:56-59.)



(RACK-1003, Fig. 6B (annotated).)



(RACK-1003, Fig. 7 (annotated).)

Accordingly, each of the rotation points on the corner of a window and the rotation point in the center of the window disclose “wherein the rotation point is within or on the window,” as claimed. (RACK-1009, p.73 cl.[7.0].)

### **Claim 9**

[9.0] ***A method of selectively rotating a computer display window having a display portion and a frame surrounding the display portion, the method comprising the steps of:***

Bruder teaches a method of selectively rotating a computer display window because it discloses a process for rotating deformable windows on a device based on a user’s input via an input device. (*Id.* at p.74 cl.[9.0]; RACK-1003, 6:15-19.) “An example of a rotation about the origin of the window is shown in FIG. 6B, which illustrates an initial window 612 translated clockwise by an angle 616 approximately equal to  $10^\circ$ . The deformed window 614 has a new angle relative to the x-axis of the image coordinate system.” (RACK-1003, 6:56-64.)

To the extent that the preamble limits the claims, the limitations of a “computer display window having a display portion and a frame surrounding the display portion” are substantially similar to limitations already addressed in claim limitations [1.0]-[1.2]. (RACK-1009, p.74 cl.[9.0].) For the same reasons as set forth above, these limitations are taught by the prior art. (*Id.*)

**[9.1] *determining a rotation point***

Bruder teaches the step of “determining a rotation point” because it discloses that “ $x_{input}$ ,  $y_{input}$ ” is “given by the pointing device as the user drags the corner [of the window].” (*Id.* at p.75 cl.[9.1]; RACK-1003, 7:7-8.) In Bruder, as the user uses the mouse to provide input, a mathematical algorithm uses the x,y input from the mouse to select and determine the rotation point. (RACK-1009, p.75 cl.[9.1].)

Accordingly, receiving input from a user’s mouse to select and determine the rotation point discloses a “determining the rotation point,” as claimed. (*Id.*)

**[9.2] *rotating the window about the rotation point at the discretion of the user***

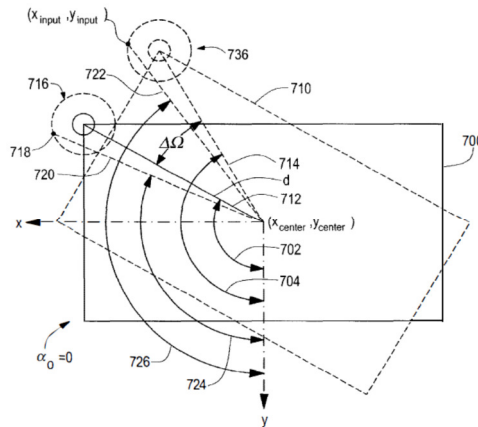
Bruder teaches “rotating the window about the rotation point at the discretion of the user” because it discloses multiple rotation points that may be used to rotate a deformable window at the discretion of a user. (*Id.* at p.76 cl.[9.2].) For example, the user can adjust the amount of degrees of rotation:

When rotation is about around the center point of the window, the coordinates of the origin corner also must change, as illustrated in FIG. 7.

To rotate the deformable window, the user is dragging the upper left

corner of the deformable window, and the user's input is indicating a change in the rotation angle alpha,  $\alpha$ , which corresponds to a change in rotation of the deformable window.

(RACK-1003, 6:67-7:6 (emphasis added).)



(RACK-1003, Fig. 7.)

Accordingly, rotating a window around a rotation point as directed by a user discloses “rotating the window about the rotation point at the discretion of the user,” as claimed. (RACK-1009, p.76 cl.[9.2].)

[9.3] *wherein the plane of the window, the plane of rotation, and the rotation point are coplanar.*

This limitation is identical to the language contained in claim [1.4], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.77 cl.[9.3].)

[10.0] *The method according to claim 9, wherein the step of rotating comprises the step of clicking and holding the window while dragging the window to the selected orientation*

Bruder discloses “the step of rotating comprises the step of clicking and holding the window while dragging the window to the selected orientation” because it discloses that as a user moving a mouse while keeping the button pressed will rotate an object to a desired orientation. (*Id.* at p.78 cl.[10.0]; RACK-1003, 7:35-44.)

Accordingly, keeping a button pressed while rotating an object to a desired orientation discloses the “step of rotating comprises the step of clicking and holding the window while dragging the window to the selected orientation,” as claimed. (RACK-1009, p.78 cl.[10.0].)

### **Claim 13**

**[13.0] *The method according to claim 9, wherein the step of rotating comprises the step of returning the window to a zero degree orientation***

Bruder teaches “wherein the step of rotating comprises the step of returning the window to a zero degree orientation” because it discloses that rotation has a range of “ $0^{\circ} \leq \alpha < 360^{\circ}$ .” (*Id.* at p.78 cl.[13.0]; RACK-1003, 6:67-7:2.) Since the window has a rotational range of between 0 and 360 degrees, a user can rotate the window to any rotation angle and return it back to a zero degree orientation, e.g., rotate it back to a 0 degree angle. (RACK-1009, p.78 cl.[13.0].)

Accordingly, a user can rotate the window to a rotation of 0 degrees, a zero degree orientation, thereby disclosing “wherein the step of rotating comprises the step of returning the window to a zero degree orientation,” as claimed. (*Id.*)

**Claim 14**

**[14.0] *A system for selectively rotating a computer display window having a display portion and a frame surrounding the display portion, the system comprising***

Bruder teaches “a system for selectively rotating a computer display window” because it discloses that a user can use a mouse to drag a corner of a window to cause the window to turn around the window’s center point. (*Id.* at p.79 cl.[14.0]; RACK-1003, 6:15-19.) “An example of a rotation about the origin of the window is shown in FIG. 6B, which illustrates an initial window 612 translated clockwise by an angle 616 approximately equal to 10°. The deformed window 614 has a new angle relative to the x-axis of the image coordinate system.” (RACK-1003, 6:56-64.)

To the extent that the preamble limits the claims, the limitations of a “computer display window having a display portion and a frame surrounding the display portion” are substantially similar to limitations already addressed in claim limitations [1.0]-[1.2]. (RACK-1009, p.79 cl.[14.0].) For the same reasons as set forth above, these limitations are taught by the prior art. (*Id.*)

**[14.1] *means for determining a rotation point***

Bruder teaches a “means for selecting the rotation point” because it discloses that “ $x_{input}$ ,  $y_{input}$ ” is “given by the pointing device as the user drags the corner [of the window].” (*Id.* at p.80 cl.[14.1]; RACK-1003, 7:7-8). In Bruder, as the user



uses the mouse to provide input, a mathematical algorithm uses the x,y input from the mouse to select and determine the rotation point. (RACK-1009, p.80 cl.[14.1].)

Accordingly, the mouse that provides the input to select and determine the rotation point discloses a “means for selecting the rotation point,” as claimed. (*Id.*)

[14.2] ***means for rotating the window about the rotation point at the discretion of the user***

This limitation is substantially similar to the language contained in claim [1.3], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.81 cl.[14.2].)

[14.3] ***wherein the plane of the window, the plane of rotation, and the rotation point are coplanar***

This limitation is identical to the language contained in claim [1.4], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.82 cl.[14.3].)

### **Claim 15**

[15.0] ***The system according to claim 14, wherein means for rotating comprises means for clicking and holding the window while dragging the window to the selected orientation***

This limitation is substantially similar to the language contained in claim [10.0], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.82 cl.[15.0].)

Further, Bruder also discloses a “means for” click and holding the window while dragging the window to the selected orientation because Bruder discloses the user pressing and moving a pointing input device, such as a mouse, to rotate a window to a desired orientation. (*Id.*; RACK-1003, 7:35-44.)

Accordingly, the point input device, such as a mouse, that a user presses and moves to rotate a window to a desired orientation discloses “means for clicking and holding the window while dragging the window to the selected orientation,” as claimed. (RACK-1009, p.82 cl.[15.0].)

### **Claim 18**

[18.0] *The system according to claim 14, wherein means for rotating comprises means for returning the window to a zero degree orientation*

This limitation is substantially similar to the language contained in claim [13.0], and for the same reasons as set for the above, this limitation is taught by the prior art. (*Id.* at p.83 cl.[18.0].)

Further, Bruder also discloses a “means for” returning the window to a zero degree orientation because Bruder discloses the user pressing and moving a pointing input device, such as a mouse, to rotate a window to its origin position. (*Id.*; RACK-1003, 7:35-44, 6:56-59.)

Accordingly, the point input device, such as a mouse, that a user presses and moves to rotate a window to the origin position discloses “means for returning the window to a zero degree orientation,” as claimed. (RACK-1009, p.83 cl.[18.0].)

iv. **Challenge #4: Claims 3, 11, and 16 are obvious over Bruder in view of Takano.**

Claims 3, 11, and 16 are obvious over Bruder in view of U.S. Patent No. 5,045,844 to Takano et al. (RACK-1005). Takano issued from U.S. Patent Application No. 07/263,194, filed on October 27, 1988, and is prior art under 35 U.S.C. § 102(b). Bruder in view of Takano is presented to supplement the teachings of Bruder with respect to (i) a means for selectively rotating that comprises a menu command and (ii) rotating a window by predetermined increments.

*Reasons to Combine:* It would have been obvious to combine the prior art elements of a window that can that can be rotated (e.g., the system of Bruder) with a window that can be rotated by a predetermined increment via a menu command (e.g., the system of Takano), because the combination would have been a use of known techniques to improve similar devices in the same way. (RACK-1009, ¶109); *see* M.P.E.P. § 2143(C).

Both Bruder and Takano are directed to similar systems that rotate objects including rectangle bounded areas of the display (e.g. windows). (RACK-1009, ¶110.) Specifically, Bruder teaches a deformable window with a frame and a display portion. Bruder's windows are formed when "a user identifies the region of interest by deforming the window (206) to enclose the lettering 306 . . . ." (RACK-1003, 4:41-42.) Takano also teaches a window (e.g. rectangular area) definable by

the user, (RACK-1005, 1:40-46), but adds the feature of rotating windows using menu commands. (RACK-1005, 1:26-39.) Takano further adds that rotating via the menu command is done in predetermined increments. (RACK-1005, 1:31-39.)

Adding the menu rotation feature of Takano to the rotatable windows of Bruder would have used known techniques to improve a similar system (e.g., the system of Bruder) in the same way. (RACK-1009, ¶113.) Takano's feature of rotating a window via a menu command, when combined with Bruder, would have rotated windows in Bruder in the same manner. (*Id.*) Implementing rotation, the problem addressed in both Bruder and Takano, would provide a reason for a programmer to look to Takano for ways to implement that function. (*Id.*)

Incremental rotation using a menu command is well within the purview of a programmer of ordinary skill dealing with the control of graphical elements, as indicated by Takano. (*Id.*) Certainly, a programmer using common sense and the ordinary tools available to him or her for graphical user interface control would look to variations such as rotation by predetermined increments using menu commands, as an obvious improvement, which is consistent with and supported by the teachings in Takano. (*Id.*) Accordingly, a person of ordinary skill in the art would combine the known elements of Bruder and Takano because the combination would have used known techniques to improve a similar system (e.g., the system of Bruder) in the same way. (*Id.*)

### **Claim 3**

[3.0] *The window according to claim 1, wherein the means for selectively rotating comprises a menu command*

Takano teaches “wherein the means for selectively rotating comprises a menu command” because it teaches rotating rectangular areas using a menu command:

In a window (not shown) on the screen 21, a menu showing various modes for moving the rectangular area, such as a parallel move mode, a designed angle rotation and move mode, a rightward 90° rotation and move mode and a leftward 90° rotation and move mode, can be specified when a menu switch attached to the stylus is turned on. Thus, by specifying a desired menu with the stylus, a command appropriate thereto can be executed.

(*Id.* at p.86 cl.[3.0]; RACK-1005, 1:26-39 (emphasis added).)

Accordingly, allowing users to rotate rectangular areas by use of a menu command, Takano discloses “wherein the means for selectively rotating comprises a menu command,” as claimed. (RACK-1009, p.86 cl.[3.0].)

### **Claim 11**

[11.0] *The method according to claim 9, wherein the step of rotating comprises the step of rotating the window by predetermined increments*

Takano teaches “wherein the step of rotating comprises the step of rotating the window by predetermined increments” because it discloses prior art systems that rotate a rectangular area by 90 degrees in either direction:

In a window (not shown) on the screen 21, a menu showing various modes for moving the rectangular area, such as a parallel move mode, a designed angle rotation and move mode, a rightward 90° rotation and move mode and a leftward 90° rotation and move mode, can be specified when a menu switch attached to the stylus is turned on. Thus, by specifying a desired menu with the stylus, a command appropriate thereto can be executed.

(*Id.* at p.87 cl.[11.0]; RACK-1005, 1:31-39.)

Accordingly, rotating a rectangle by a rightward or leftward 90° rotation discloses “wherein the step of rotating comprises the step of rotating the window by predetermined increments,” as claimed. (RACK-1009, p.87 cl.[11.0].)

### **Claim 16**

[16.0] *The system according to claim 14, wherein means for rotating comprises means for rotating the window by predetermined increments*

This limitation is substantially similar to the language contained in claim [11.0], but recites a “means for” carrying out the function. Takano recites a menu command as a “means for” rotating the window in either direction by 90 degrees. (*Id.* at p.87 cl.[16.0].) Accordingly, using a menu command to rotate by 90 degrees

discloses “wherein means for rotating comprises means for rotating the window by predetermined increments,” as claimed. (*Id.*)

v. **Challenge #5: Claims 8, 12, and 17 are obvious over Bruder in view of Kreegar**

Claims 8, 12, and 17 are obvious over Bruder in view of U.S. Patent No. 5,396,590 to Kreegar (RACK-1004). Kreegar issued from U.S. Patent Application No. 07/946,930, filed on September 17, 1992. Accordingly, Kreegar is prior art under 35 U.S.C. § 102(b). Bruder in view of Kreegar is presented to supplement the teachings of Bruder with respect to (i) a rotation point that is outside the window and (ii) toggling a window between two preselected orientations.

*Reasons to Combine:* It would have been obvious to combine the prior art elements of a window that can that can be rotated (e.g., the system of Bruder) with a window that can be rotated about a rotation point that is outside the window (e.g., the system of Kreegar), because the combination would have used known techniques to improve a similar device in the same way. (RACK-1009, ¶115); *see* M.P.E.P. § 2143(C).

Both Bruder and Kreegar are directed to similar systems that rotate objects including rectangle bounded areas of the display (e.g. windows). (RACK-1009, ¶116) Kreegar improves Bruder by adding the feature of rotating shapes about rotation points that are outside of the shape, (RACK-1004, 6:44-7:8), and an undo

feature that toggles a shape between two preselected orientations, (RACK-1004, 6:27-31). (RACK-1009, ¶119.)

Adding the rotation points located outside of a shape, as taught in Kreegar, to the rotatable windows of Bruder would have been a use of known techniques to improve the system of Bruder in the same way because the function of Kreegar allowing a user to select a rotation point outside of the window would have functioned in the same way when used in Bruder's system. (*Id.*) Since Bruder allows users to select one of multiple rotation points, allowing selection of a rotation point outside of a window would have used the known techniques taught by Kreegar to improve Bruder's system. (*Id.*) A programmer would look to Kreegar for the reason that it addresses the same problem of rotation as does Bruder. (*Id.*) Kreegar's teaching of a user-selected rotation point outside of the shape to be rotated is a standard variation of graphical user interface manipulation of objects, well within the common sense teachings and toolkit for a programmer dealing with the issue of rotating graphics. (*Id.*) Kreegar points out the obviousness of such implementation as being one that a programmer would readily choose. (*Id.*)

Accordingly, a person of ordinary skill in the art would combine the known elements of Bruder and Kreegar because the combination would have used known techniques to improve a similar system in the same way. (*Id.*)

**Claim 8**



[8.0] *The window according to claim 1, wherein the rotation point is outside the window*

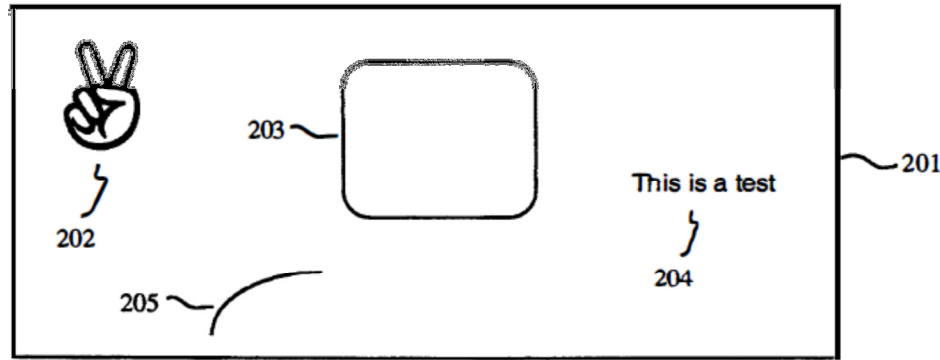
Kreegar discloses “wherein the rotation point is outside the window” because it discloses rotating graphical objects using rotation points that can be positioned anywhere with respect to rotated object:

The rotate control defaults to rotation around the center of the shape.

However, it can be moved anywhere in the **visible display area of the**

**display device.** The movable rotate control 303 provides for rotation of objects around arbitrary points. To move the rotate control from the shape's default center, the mouse should be placed on or near the center of the rotate control, thereby highlighting the rotate control center. Then, to move the rotate control to a new, arbitrary, rotation point, using the mouse, select down on the control and drag it to the desired rotational center. Rotation then will be about this new arbitrary center point as described above.

(*Id.* at p.90 cl.[8.0]; RACK-1004, 6:44-7:8 (emphasis added).) Fig. 2 shows that rotatable objects are smaller than the computer display 201:



(RACK-1004, Fig. 2, 5:29-33.) Accordingly, moving a rotation point to an arbitrary position anywhere on the visible display area, where the object to be rotated is smaller than the visible display area, discloses “wherein the rotation point is outside the window,” as claimed. (RACK-1009, p.90 cl.[8.0].)

### **Claim 12**

[12.0] *The method according to claim 9, wherein the step of rotating comprises the step of toggling the window between two preselected orientations*

Kreegar teaches “wherein the step of rotating comprises the step of toggling the window between two preselected orientations” because it discloses an “undo” command to switch from the current orientation to a previous orientation:

As with other shape manipulations, to move back to an original position, an “undo” command may be executed.

(*Id.* at p.92 cl.[12.0]; RACK-1004, 7:14-15.) The “undo” commands essentially perform a toggling function:

To undo scaling, an “undo” command can be executed. Such “undo” commands are provided by most graphics and computer systems

which maintain a memory as to previously executed operations and are **capable of restoring the system to a position just prior to that operation.**

(RACK-1009, p.92 cl.[12.0]; RACK-1004, 6:27-31 (emphasis added).) While the function of the “undo” command is taught with reference to scaling rather than rotating, a person of ordinary skill in the art would understand Kreegar to teach “undo” commands for rotation manipulations since “undo” commands are available for “other shape manipulations.” (RACK-1009, p.92 cl.[12.0].)

Accordingly, a person of ordinary skill in the art would understand Kreegar to teach toggling between two preselected orientations because Kreegar’s “undo” feature would toggle a shape from one rotation to a previous rotation. (*Id.*)

### **Claim 17**

[17.0] *The system according to claim 14, wherein means for rotating comprises means for toggling the window between two preselected orientations*

This limitation is substantially similar to the language contained in claim [12.0], but recites a “means for” carrying out the function. Kreegar recites an “undo” command as a means for toggling the window between two preselected orientations. (*Id.* at p.93 cl.[17.0].) Since “undo” commands would be understood by a person of ordinary skill in the art to be available via a menu, this limitation is taught by the prior art. (*Id.*)

### **vi. Challenge #6: Claim 5 is obvious over Bruder in view of**

**Photoshop**

Claim 5 is obvious over Bruder in view of Photoshop. Bruder in view of Photoshop is presented to supplement the teachings of Bruder with respect to a means for selectively rotating comprises a rotation cursor.

*Reasons to Combine:* It would have been obvious to combine the prior art elements of a window that can that can be rotated (e.g., the system of Bruder) with a rotation cursor to provide feedback to the user (e.g., the system of Photoshop), because the combination would have used known techniques to improve similar devices in the same way. (RACK-1009, ¶121); *see* M.P.E.P. § 2143(C).

Both Bruder and Photoshop are directed to similar systems that rotate objects including rectangle bounded areas of the display (e.g. windows). (RACK-1009, ¶122.) Photoshop improves Bruder by adding the feature of displaying a rotation cursor to provide feedback to the user. (*Id.* at ¶124; RACK-1008 at 185.)

Adding a rotation cursor as feedback to a user, as taught in Photoshop, to the rotatable windows of Bruder would have been a use of known techniques to improve the application of Bruder in the same way because providing visual feedback by a rotation cursor, as taught in Photoshop, would have functioned in the same way when used with Bruder. (RACK-1009, ¶125.) Since Photoshop addresses the same problem of Bruder concerning object rotation, it would be common sense to a programmer to look to Photoshop for variations on ways to

provide feedback to a user during rotation, such as by using a rotation cursor. (*Id.*)

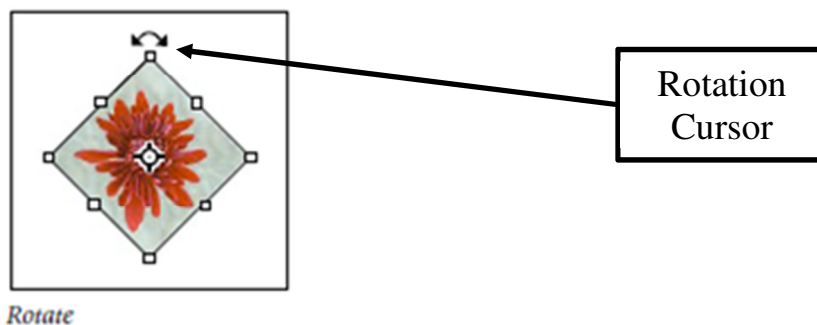
Accordingly, a person of ordinary skill in the art would combine the known elements of Bruder and Photoshop because the combination would have used known techniques to improve a similar system in the same way. (*Id.*)

### **Claim 5**

[5.0] *The window according to claim 1, wherein the means for selectively rotating comprises a rotation cursor*

Photoshop teaches “wherein the means for selectively rotating comprises a rotation cursor” because it discloses dragging a special “curved, two-sided arrow” cursor as the means for rotating:

- To rotate, move the pointer outside of the bounding border (it turns into a curved, two-sided arrow), and then drag. Press Shift to constrain the rotation to 15° increments.



(*Id.* at p.95 cl.[5.0]; RACK-1008 at 185.)

Accordingly, a curved, two-sided arrow cursor that is dragged to rotate an object discloses “wherein the means for selectively rotating comprises a rotation cursor,” as claimed. (RACK-1009, p.95 cl.[5.0].)

**V. Conclusion**

For the reasons set forth above, Petitioner has established a reasonable likelihood of prevailing with respect to at least one claim of the '978 Patent. Indeed, Petitioner has set forth multiple independent cases that establish a reasonable likelihood of prevailing with respect to claims 1-18 of the '978 Patent. Therefore, Petitioner asks that the Patent Office order an *inter partes* review trial and then proceed to cancel claims 1-18.

Respectfully submitted,

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Attorney Docket No.: 47015.115

Dated: April 12, 2013

## **PETITIONER'S EXHIBIT LIST**

April 12, 2013

RACK-1001	U.S. Patent No. 6,326,978
RACK-1002	Prosecution History of U.S. Patent No. 6,326,978
RACK-1003	U.S. Patent No. 6,327,393 to Bruder
RACK-1004	U.S. Patent No. 5,396,590 to Kreegar
RACK-1005	U.S. Patent No. 5,045,844 to Takano et al.
RACK-1006	U.S. Patent No. 6,137,468 to Martinez et al.
RACK-1007	U.S. Patent No. 5,345,543 to Capps et al.
RACK-1008	Adobe Systems, Inc., Adobe Photoshop 5.0 User Guide, available at <a href="http://cinematicarts.unm.edu/documents/Cage%20Manuals/Adobe_Photoshop_User_Guide.pdf">http://cinematicarts.unm.edu/documents/Cage%20Manuals/Adobe_Photoshop_User_Guide.pdf</a> (last visited Apr. 12, 2013).
RACK-1009	Declaration of Don Turnbull
RACK-1010	Adobe Systems, Inc., Press Release for Adobe Photoshop 5.0, available at <a href="http://www.adobe.com/es/aboutadobe/pressroom/presskits/pdfs/photoshop50/ps5ships.pdf">http://www.adobe.com/es/aboutadobe/pressroom/presskits/pdfs/photoshop50/ps5ships.pdf</a> (last visited Apr. 12, 2013).
RACK-1011	Team Adobe Development, Adobe Photo 5.0 Classroom in a Book, available at <a href="http://www.sonic.net/mnitedub/pccafe/reviews/phsclassroominbook/psclassroominbook.html">http://www.sonic.net/mnitedub/pccafe/reviews/phsclassroominbook/psclassroominbook.html</a> (last visited Apr. 12, 2013).

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

<i>In re</i> patent of: Robbins	§	
	§	
U.S. Patent No. 6,326,978	§	Petition for <i>Inter Partes</i> Review
	§	
Issued: December 4, 2001	§	
	§	Attorney Docket No.: 47015.115
Title: DISPLAY METHOD FOR	§	Customer No.: 27683
SELECTIVELY ROTATING	§	Real Party in Interest: Rackspace
WINDOWS ON A	§	Hosting, Inc.
COMPUTER DISPLAY		

**CERTIFICATE OF SERVICE**

The undersigned certifies, in accordance with 37 C.F.R. § 42.205, that service was made on the Patent Owner as detailed below.

*Date of service* April 12, 2013

*Manner of service* EXPRESS MAIL

*Documents served* Petition for *Inter Partes* Review

Petitioner's Exhibit List

Exhibits RACK-1001 through RACK-1011

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