



3. In forming my opinions, I rely on my knowledge and experience in the field and on documents and information referenced in this Declaration.

## II. BACKGROUND AND EXPERTISE

4. I earned B.S. and M.S. degrees in Electrical Engineering, and a Ph.D. degree in Electrical Engineering (with a minor in Computer Science), all from Iowa State University. I also earned an M.S. degree in Experimental Psychology from the University of Oregon. I have been active in several professional societies and have worked in the computer and electronics field for over forty (40) years. Details of my education and work experience are set forth in my *curriculum vitae*, which is attached as Appendix A.

5. I have worked in the area of computer graphics and video systems and consider myself to be at least a person of ordinary skill in the art.

6. I have been retained by Apple Computer as an expert for these reexamination proceedings. No part of my compensation is dependent upon the outcome of these reexamination proceedings or any issue in it.

## III. INFORMATION CONSIDERED

7. In forming my opinions, in addition to my knowledge and experience, I have considered the following documents and things that I have obtained, or that have been provided to me:

- a. U.S. Patent No. 7,831,926 (herein “ ’926 patent”);
- b. U.S. Patent No. 7,461,353 (herein “ ’353 patent”);
- c. File history for the ’926 patent and for the ’353 Patent;
- d. The Pad++ references cited in the ’926 *Inter Partes* request and the ’353 *Inter Partes* request;
- e. The JP ’169 reference cited in the ’926 *Inter Partes* request and the ’353 *Inter Partes* request;
- f. The Pad++ Reference Manual Version 0.2.7 (herein “Pad++ Reference Manual”);
- g. The Pad++ Programmer’s Guide version 0.2.7 (herein “Pad++ Programmer’s Guide”);
- h. A Brief Tour Through Pad++, published April 1997 (herein “Pad++ Brief Tour”);
- i. Matthews, *et al.*, *Vector Markup Language (VML)*, World Wide Web Consortium Note, May 13, 1998, Note-VML-19980513, [http://www.w3.org/TR/1998/Note-VML\\_19980513](http://www.w3.org/TR/1998/Note-VML_19980513) (“VML”)

## IV. PRIOR ART REFERENCES

### A. VML prior art reference

#### 1. Overview of the VML prior art references

8. VML “defines a format for the encoding of vector information together with additional markup to describe how that information [for example, webpage content] may be displayed and edited.” [p. 1, VML].

9. VML was used, among other things, to represent computer graphics (which include webpage content) in accordance with a “vector” format to allow for zooming and panning of webpages in response to user-entered inputs. [pp. 3-4, VML].

10. “In the VML case, the workflow generates locations and related information for vector paths and related objects (such as bitmaps) which are then rendered using native system functionality.” [p.4, VML].

11. In other words, VML provides an encoder for encoding coordinate values as vectors which represent information, such as webpage content, and how they may be displayed and edited, for example, when the content is zoomed and panned in response to user-entered inputs.

12. For example, VML specifically recites that “2D coordinates are defined as single attributes ‘x,y’ rather than pairs of attributes.” [p.7, VML].

13. VML further recites that “Vector 2D [is] numeric data in the form X,Y, usually used to list a coordinate in 2D space, may be in form ‘x y’ or ‘x, y’.” [p. 11, VML].

14. “The shape and group elements are containing blocks for their content . . . Inside the containing block a local coordinate system is defined for any sub-elements using the `coordsize` and `coordorigin` attributes. All CSS2 positioning information is expressed in terms of this local coordinate space.” [p. 10, VML]

15. “The `coordorigin` attribute defines the coordinate at the top left corner of the containing block. . . . The rationale behind this is that the vectors defining a shape can be specified in a local coordinate system.” [p. 10, VML].

16. VML recites that the default for the `coordorigin` is (0,0). [p. 15, VML]. Thus, according to the VML specification, a coordinate (x,y) represents, by default, a vector from (0,0) to (x,y) for that containing block.

#### 2. Those of Ordinary Skill in the Art would have Combined the VML Prior Art References with Any of the JP 169 reference and the Pad++

**references when Considering the Problem Presented by the '926 Patent and the '353 Patent.**

17. Because the VML specification, the Pad++ system, and the JP 169 system are vector based, those of ordinary skill in the art would have considered one or more of these references together.

18. Additionally, since the Pad++ references discuss improving current web browsers and graphical user interfaces and since VML was publicly available as early as May 1998, those of ordinary skill in the art would have considered VML in improving on the Pad++ system.

**a. Combining VML with Either of the Pad++ References or the JP 169 Reference Yields Predictable Results**

19. One of ordinary skill in the art would have found that combining the Pad++ system or the JP 169 system with the VML specification yields predictable results.

20. For example, both the Pad++ system and the JP 169 system teach a method of zooming and panning webpages. As discussed above, VML was a publicly available and well-known way of presenting images and objects, such as those found on webpages, in a vector format that simplified and increased the efficiency of presenting, zooming and panning such information.

21. Those of ordinary skill in the art looking to enhance the presentation of webpages on small devices (such as personal digital assistants (PDAs)), similar to the problem presented in the '926 patent and the '353 patent, would have considered combining the Pad++ system with VML to further enhance, increase the efficiency of, and broaden the applicability to existing operating systems and platforms of the zoomable web browser described in the Pad++ references. Since the Pad++ references disclosed a zoomable and pannable web browser, applying the VML specification to the Pad++ references would have yielded the predictable results of a webpage capable of being zoomed and panned in response to user-entered inputs, wherein the coordinate values of the Pad++ references were encoded using the VML specification and Pad++ implemented the vector format and utilized the vector-based panning and zooming techniques disclosed in the VML specification.

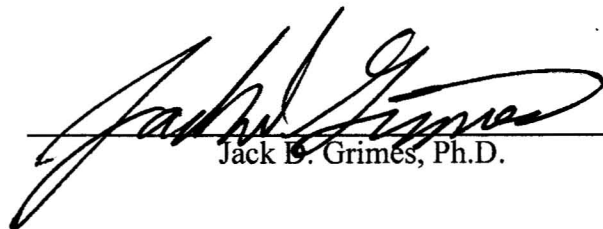
22. Similarly, those of ordinary skill in the art looking to enhance the presentation of webpages on small devices (such as personal digital assistants (PDAs)), similar to the problem presented in the '926 patent and the '353 patent, would have considered combining the JP 169 system with VML to further enhance, increase the efficiency of, and broaden the applicability to

existing operating systems and platforms of the zoomable web browser described in JP 169. Since the JP 169 reference taught a zoomable and pannable web browser that can include a webpage having an image associated with clickable data described by the coordinates of the bounding box of the clickable data, applying the VML specification to JP 169 would have yielded the predictable results of a webpage capable of being zoomed and panned in response to user-entered inputs, wherein the coordinate values of JP 169 were encoded using the VML specification and JP 169 implemented the vector format and utilized the vector-based panning and zooming techniques disclosed in the VML specification.

## V. SUMMARY

23. I note that my analysis is continuing and that I may modify or supplement my conclusions as I receive additional information. I declare under penalty of perjury that the foregoing Declaration is true and correct.

Dated: April 2, 2012



Jack E. Grimes, Ph.D.