

# **Randall Declaration**

## **Exhibit 5**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

MIRROR WORLDS, LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

Civil Action No. 6:08-CV-88 LED

JURY TRIAL DEMANDED

APPLE INC.,

Counterclaim Plaintiff,

v.

MIRROR WORLDS LLC,  
MIRROR WORLDS TECHNOLOGIES,  
INC.,

Counterclaim Defendants.

**APPLE INC.'S OPENING CLAIM CONSTRUCTION BRIEF**  
**ON U.S. PATENT NO. 6,613,101 (THE "PILES" PATENT)**

**JURY TRIAL DEMANDED**

Case No. Civil Action No. 6:08-CV-88 LED

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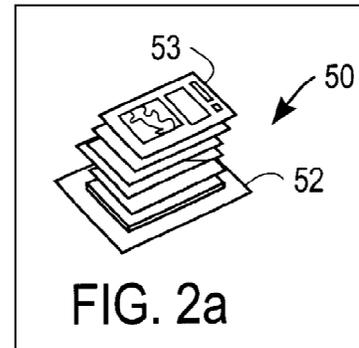
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## I.

## INTRODUCTION

Apple’s U.S. Patent No. 6,613,101—known as the “Piles” patent—describes an improved user interface for a computer system based on the metaphor of a “pile” of documents. Like a conventional folder, a “pile” is a way of representing a collection of documents. An example of a “pile” is shown in the figure to the right.

Unlike a conventional folder, however, a pile provides a user with some indication of its contents through its physical appearance. For example, the tops and edges of the documents that may be visible in the stack may provide information about the kinds of documents in the pile, for instance with thicker documents suggesting larger documents.



The primary claim construction dispute about the “Piles” patent relates to the phrase “graphical iconic representation of a collection of ... documents.” This phrase appears in all of the asserted independent claims. Mirror Worlds Technologies, Inc. (“MWT”) argues that this phrase should be limited to using a single, small, and static picture to represent a collection of documents. All three of MWT’s proposed restrictions—that the graphical iconic representation must be limited to a single picture, that it must be small, and that it must be static—should be rejected, because they would exclude the preferred embodiment, contradict the file history, and be inconsistent with the remaining claim language.

The parties also have three other disputes, all of which relate to what should be selected as corresponding structure for terms that the parties agree are means-plus-function terms. Each of the claim construction disputes is discussed further below.

## II.

### BACKGROUND

#### A. U.S. Patent No. 6,613,101 (Apple's "Piles patent")

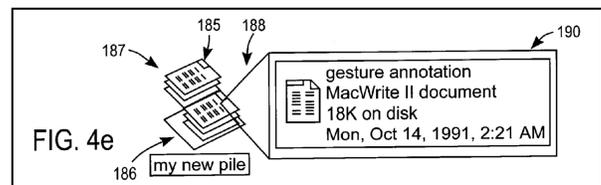
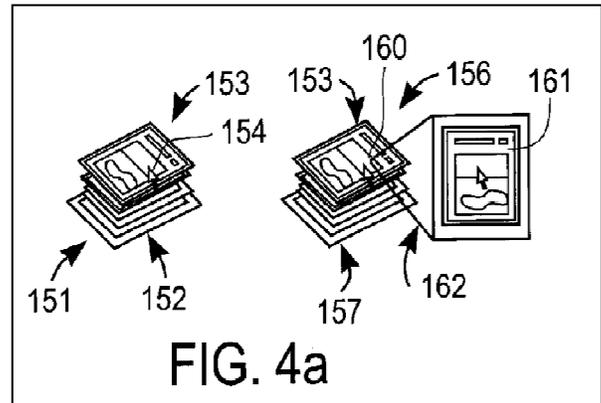
Apple's Piles patent grew out of research done in Apple's Advanced Technology Group in the late 1980s and early 1990s. Apple's research team recognized that as the amount of information users confront on their computers increases, tools to organize and manipulate this information become increasingly important. They sought to improve the file-organizing interfaces of the time, such as the Finder on the Apple Mac OS operating system or Windows Explorer. These hierarchical file-organizing systems allowed users to manually create and use a hierarchy of folders or subdirectories to organize their documents. Smith Decl., Exh. A [Piles patent] at 1:39-49. However, these hierarchies were generally rigid, and the existing systems offered "little assistance in [the] often tedious task" of categorizing and filing documents. Exh. A [Piles patent] at 2:34-42. In addition, the methods these tools provided for browsing through the contents of a folder or subdirectory were limited to the display of things such as file names, dates, and static icons.

To generate ideas for addressing these problems, Apple's team conducted a study to observe how users organize the large amounts of information they work with in their physical offices, focusing on the ways in which people use and interact with filing systems. Smith Decl., Exh. B [CHI '92 Piles article] at 627. One significant observation was that "users like to group items spatially and often prefer to deal with information by creating physical piles of paper." *Id.* Another observation was that by "looking at the pile's outside form, [users] were able to infer quite a lot about its contents," and that as a result "piles facilitate browsing." *Id.* at 628.

Building off their observations and research, in 1992 Apple's team filed the application that led to the Piles patent. The Piles patent describes an improved file-organizing interface with two important classes of features. First, and more importantly

for purposes of the claims asserted in this case, the Piles patent described an improved user interface, based on a “piles” metaphor, to facilitate organizing and browsing through files. Exh. A [Piles patent] at 2:58-62. Second, it described ways of automatically searching for, categorizing, and sorting files. The Piles patent explained that all files in the system are indexed and then organized automatically into “piles,” which can then be further searched and reorganized according to the needs of the user. *See id.* at 3:45-51; 3:66-4:18.

The user interface described in the Piles patent presents “piles” using a graphical iconic representation of a stack of documents, as shown for example in the figures below. *Id.* at 2:65-3:1; 3:13-18. Although displaying stacks of documents was not a new idea in itself, the prior art stacks were “dumb.” Users could not browse through the documents in the stack, and could not infer much information from the appearance of the stack. In the Piles user interface, in contrast, when a user places a cursor over a document in a pile, a preview of that document (or other information about the document) appears in a “view cone” next to the pile. *Id.* at 3:22-25. In this way, by moving the cursor across the documents in the pile and scanning the previews that pop up in response, a user may quickly rifle through the documents in the pile, whether to find the one of particular



interest or to refresh his memory of the piles’ contents. *Id.* at 3:22-26; *see also id.* at Figs. 4a, 4e. As the patent explains:

As shown in FIG. 4a, the view cone 162 points to or is connected on one side (the apex or smaller side) to the collection of documents, and the apex is positioned to

correspond to the document which has been selected for viewing in the browsing environment. The other side of the viewing cone 162 shows a proxy 161 which is, in one embodiment, a miniature of the first page of the document which has been selected for browsing. ... Once browsing has been invoked, the user may quickly scan through the pile by moving the cursor up and down the pile; in this manner, each time the cursor comes to a representation of a document in the pile, the system displays the proxy for that document within the view cone 162.

*Id.* at 9:66-10:25.

Repeatedly during the prosecution of the '724 patent—the parent of the Piles patent at issue here—Apple told the Patent Office that one way in which its “piles” were different from the prior art was that its “piles” were dynamic objects that could be interacted with, whereas the prior art disclosed “nothing more than a ‘dumb’ stack of stamps which may be treated as a group.” Smith Decl., Exh. C [’724 Pros. H.] at 724FH278 (March 20, 1996 Appellant’s Brief).<sup>1</sup> Apple explained that in contrast to the prior art, the Piles patent allowed a user to rifle through the documents in a pile to help a user remember what is in a pile, and find what he is looking for. *Id.* at 724FH275. Citing directly to the portions of Apple’s arguments on appeal that addressed this ability to interact with a pile by browsing through it, the Patent Office’s Board of Patent Appeals and Interferences issued its Decision on Appeal finding that the Examiner had improperly

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<sup>1</sup> See also Smith Decl., Exh. C [’724 Pros. H.] at 724FH179 (Dec. 3, 1993 Resp. to Office Action on ’921 App.); 724FH183-185 (Mar. 7, 1994 Final Office Action on ’921 App.); 724FH216 (Sep. 7, 1994 Prelim. Amend.); 724FH222 (Nov. 14, 1994 Office Action); 724FH237-240 (Apr. 17, 1995 Amend.); 724FH247 (June 12, 1995 Office Action); 724FH298-301 (March 20, 1996 Appellant’s Brief); 724FH332-333, 335-336, 350-51 (April 22, 1996 Examiner’s Answer); 724FH362, 364 (June 24, 1996 Appellant’s Reply); 724FH367 (July 23, 1996 Supp. Examiner’s Ans.); 724FH379, 398-399 (Oct. 29, 1999 Decision on Appeal); 724FH403-406 (March 29, 2000 Resp. to Decision on Appeal); 724FH408 (April 6, 2000 Notice of Allowance).

rejected the claims.<sup>2</sup> The claims were subsequently allowed by the Examiner and the '724 patent issued.

**B. The Asserted Claims**

Claims 1-12, the asserted claims of the Piles patent, are directed primarily to aspects of the user interface the Piles patent describes. The three independent asserted claims—claims 1, 5, and 9—all share the same basic elements, and all relate to an interface that allows users to browse through a collection of documents (*e.g.*, a pile) by allowing the user to scan through the collection by passing a cursor over the documents to obtain a display of an “indicia” (*e.g.*, a preview of the document). For example, claim 1 recites:

1. A method for organizing and viewing information in a computer filing system having a display device and a first plurality of documents, said method comprising:

[1] displaying a graphical iconic representation of a collection of said first plurality of documents;

[2a] displaying a first indicia of a first document of said collection [2b] by selecting a first position from said graphical iconic representation, [2c] wherein said first position on said graphical iconic representation is capable of being at any one of a plurality of locations on said graphical iconic representation and [2d] wherein said selecting from said graphical iconic representation comprises positioning a cursor on said graphical iconic representation; and

[3] displaying in series [4a] a second indicia of a second document and [5a] a third indicia of a third document [4b] by positioning said cursor first on a second position on said graphical iconic representation [5b] next on a third position on said graphical iconic representation.

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<sup>2</sup> See Exh. C [’724 Pros. H.] at 724FH405-406 (March 29, 2000 Resp. to Decision on Appeal).

Piles patent at claim 1 (numbering added). The first claim limitation [1] requires displaying a graphical iconic representation of a collection of documents, *e.g.*, displaying a “pile.”<sup>3</sup> The remaining limitations describe the process of browsing through a pile to display “indicia” (*e.g.*, previews) of the documents by moving the cursor: first displaying the preview [2a] of the first document selected from the collection [2b] by positioning the cursor over the appropriate position on the graphical representation of the collection [2d], then subsequently displaying previews of second [4a] and third documents [5a] as the second and third documents are selected [4b and 5b].

Independent claims 5 and 9 contain substantially similar limitations as the method claim of claim 1, but present them in the forms of apparatus and computer readable medium claims, respectively.<sup>4</sup>

### C. The Accused Product: MWT’s Scopeware

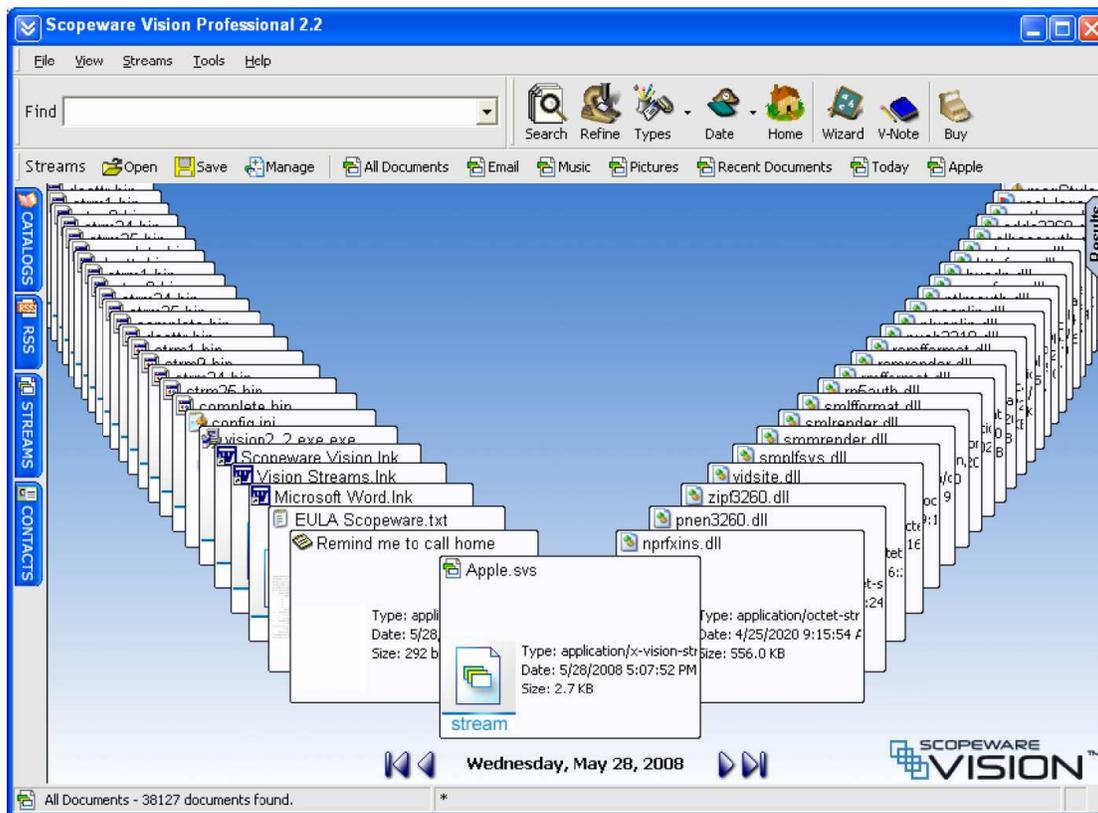
Mirror Worlds Technology, Inc. (“MWT”) was a corporation formed by David Gelernter and Eric Freeman, the named inventors of three of the Mirror Worlds patents. MWT developed a line of commercial products called Scopeware. Smith Decl., Exh. D [Excerpts from MWT/Scopeware’s website] at MW002336-2369. Scopeware was billed as implementing MWT’s patented approach to information organizing. *Id.* at MW002350, 2355, 2360, 2360. Scopeware products were marketed and sold in the United States until 2004 when the company went out of business and sold its assets to the venture capitalists who had originally backed the company. Stipulation of Facts [D.I. 123] at ¶¶ 4-6.

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<sup>3</sup> See Piles patent at 3:7-8; 3:13-18; 3:22-25 (“The user may browse then through the pile by . . .”); see also Brief Description of the Drawings, 4:20-67; Joint Claim Construction Statement [D.I. 144] at Exh. C, p. 19.

<sup>4</sup> The asserted dependent claims 2-4, 6-8, and 10-12 are not directly related to any of the present disputes before the Court. Claims 2, 4, 6, 8, and 10 relate to the locations of the previews relative to the pile. Claims 3, 7, and 11 relate to concurrent display of the previews and the pile.

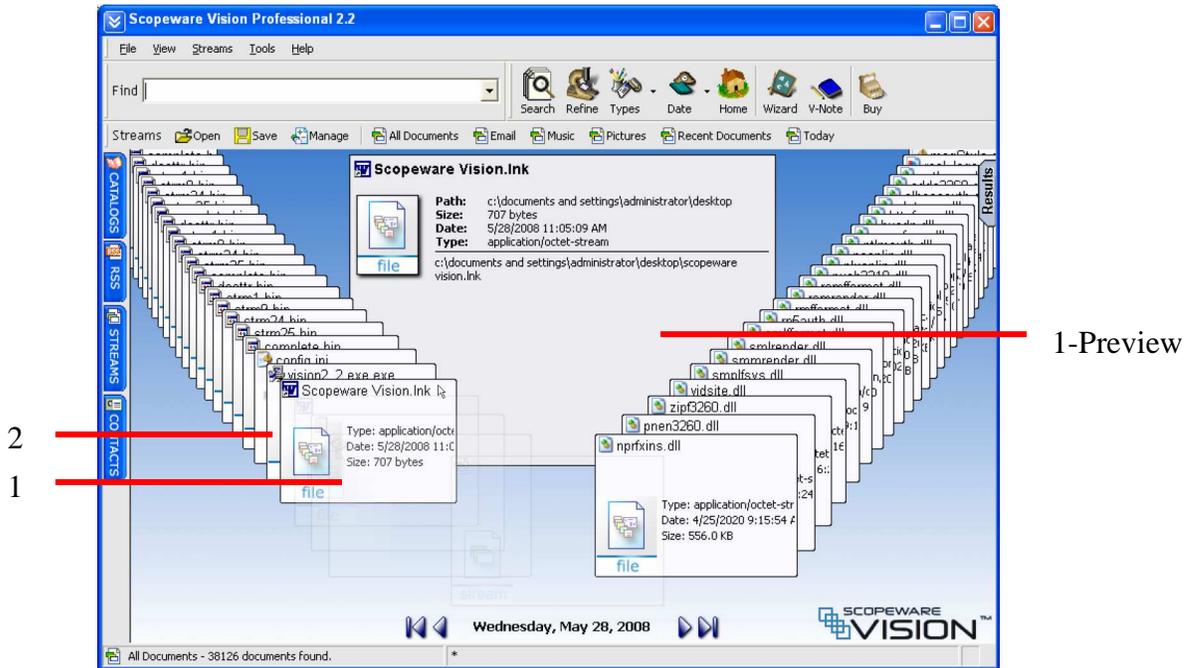
Scopeware is a software system for organizing and viewing information in a computer filing system. Scopeware’s “stream view” presents a collection of document icons displayed together as a pile of documents, as illustrated in the Scopeware screenshot below.<sup>5</sup>



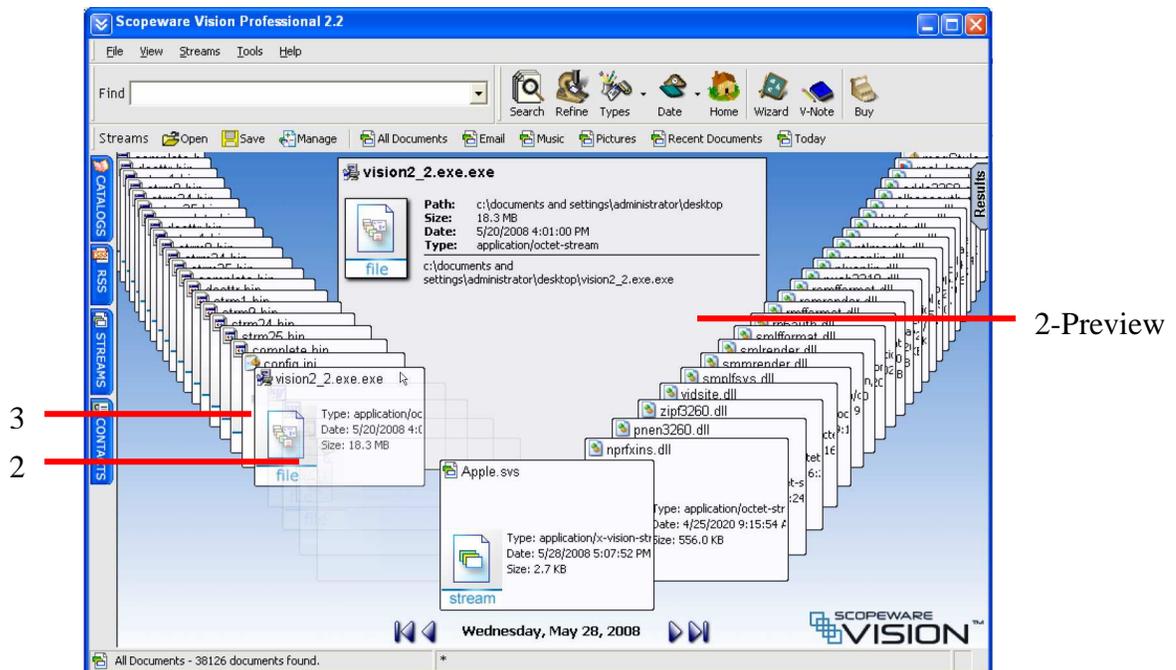
When the user positions the cursor over a document icon in the pile, a preview of that document is displayed in the center of the display. In the illustration below, the cursor is positioned over the document icon for “Scopeware Vision.Ink” (labeled “1”), and a preview of that document is displayed (labeled “1-Preview”).<sup>6</sup>

<sup>5</sup> The figures in this section are screenshots generated from a working copy of Scopeware Vision Professional 2.2. See Smith Decl., ¶ 6 and Exh. E.

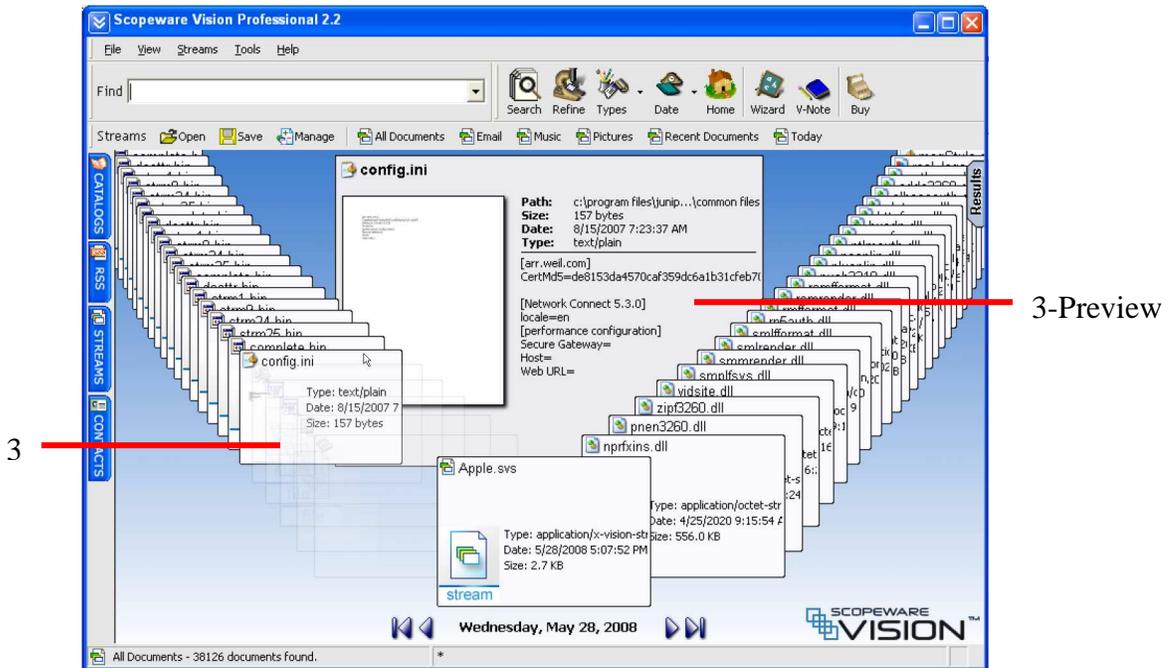
<sup>6</sup> These labels were added during word processing to assist the illustration.



If the user then slides the cursor upwards and back by one document, repositioning the cursor over the next document icon in the stack, “vision2\_2.exe.exe” (labeled “2”), then a preview of that document will be displayed. This is shown below in the figure below where the preview is labeled “2-Preview.”



If the user again repositions the cursor over the next document icon back in the stack, “config.ini” (labeled “3”), then a preview of that document will be displayed. This is shown below in the figure below where the preview is labeled “3-Preview.”



This same pattern continues as the user slides the mouse further back along the stack of document icons, and reverses as the user slides the mouse towards the front of the stack. In this way, Scopeware allows users to quickly rifle through the pile of document icons by sliding cursor back and forth over the icons in the stack and scanning the previews that are displayed in turn as each document icon in the stack is touched.

### III.

#### DISPUTED TERMS IN THE PILES PATENT

There are only four disputed terms. The parties have agreed that three of them are means-plus-function terms, and we address those terms together in the next section. We discuss the one other dispute immediately below.

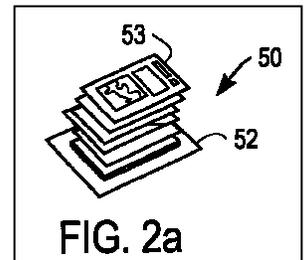
A. “graphical iconic representation of a collection of said first plurality of documents”

“a graphical iconic representation of a collection of said first plurality of documents”	“a small static picture representing a collection of documents”	“a collection of two or more document icons displayed together”
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MWT wants the phrase “graphical iconic representation of a collection of said first plurality of documents” to be limited to using: a) a single b) small, and c) static picture to represent a collection of documents. All three of MWT’s proposed restrictions should be rejected because they would exclude the preferred embodiment, contradict the file history, and be inconsistent with the remaining claim language.

1. **Limiting “graphical iconic representation of a collection ... of documents” to a single, small, and static picture excludes the preferred embodiment**

In the preferred embodiment of the Piles patent—for example, see Fig. 2a displayed at the right—collections of documents are displayed as “dynamic” piles of individual document icons, where the individual documents in the pile may be individually selected and browsed, and where piles grow in height as new documents are added to the pile:



The graphical representation of a pile may be either **a dynamic graphical representation, as in the preferred embodiment**, or a static graphical representation, such as a typical icon used in computer systems having graphical interfaces . . . The dynamic graphical representation of a pile **increases in height when a document is added to the pile** and decreases in height when a document is removed from the pile. The **icon for each document in the pile may be selected** by positioning the cursor over the icon in the pile.

Piles patent at 7:33-44.

The graphical representation 55 of Fig. 2b includes **a collection of document icons which have been stacked together** . . . to represent a pile or collection of documents.

Fig. 2c shows a pile which is similar to that shown in Fig. 2b except less information is provided by each icon which represents a single document.

*Id.* at 7:116-22.

[T]he pile 63 **includes graphical representations of documents within the pile which indicate the thickness of the document relative to other documents.**

*Id.* at 7:62-65.

**[T]he user may quickly scan through the pile by moving the cursor up and down the pile;** in this manner, each time the cursor comes to a representation of a document in the pile, the system displays the proxy for that document within the view cone 162.

*Id.* at 10:21-25.

These descriptions from the Piles specification make clear that “a graphical iconic representation...” in the preferred embodiment of the Piles patent is not a single, small, and static picture representing a collection of documents. First, a displayed pile is not a single “picture representing a collection of documents” because each document in the pile has its own icon that can be individually selected and that can vary in thickness to indicate its thickness relative to other documents. Second, a displayed pile need not be “small,” because piles grow bigger as new documents are added to the pile. Finally, the displayed pile is not “static” because the graphical icon representation is “dynamic,” getting bigger when new documents are added, and interacting with the user to allow rapid browsing through the contents of the pile.

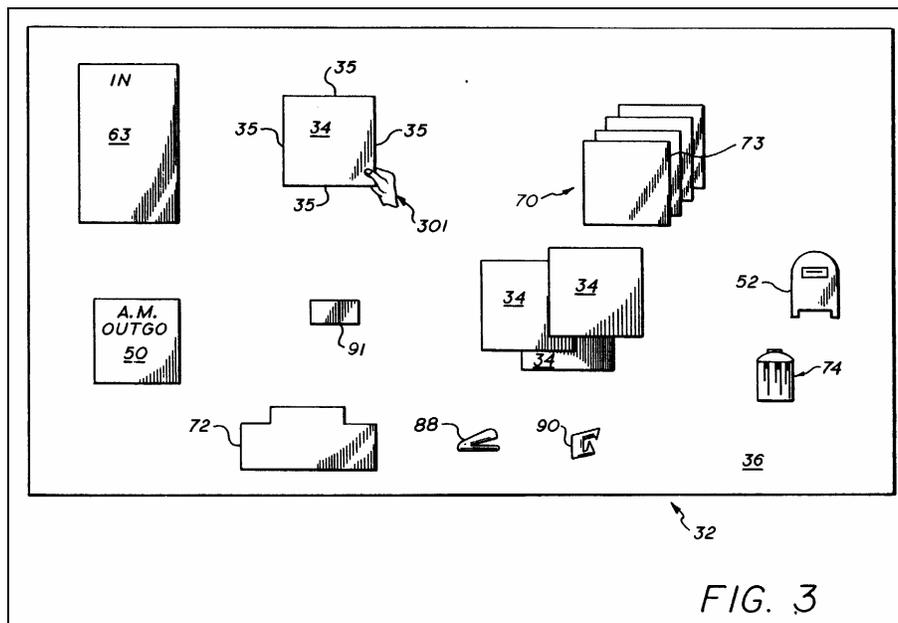
Thus, each limitation that MWT’s proposed construction seeks to add should be rejected because it would improperly exclude the preferred embodiment. *Helmsderfer v. Bobrick Washroom Equip., Inc.* 527 F.3d 1379, 1383 (Fed. Cir. 2008) (noting that “[o]ur case law generally counsels against interpreting a claim term in a way that excludes the preferred embodiment from the scope of the invention.”) (citing *Vitronics Corp. v. Conceptronc, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996)(finding that a

construction that excludes the preferred embodiment “is rarely, if ever correct”)); *see also Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 493 F.3d 1358, 1364 (Fed. Cir. 2007) (finding that the proper construction should not exclude a preferred embodiment).

**2. The prosecution history shows that, unlike the prior art that contained “dumb” stacks, piles are “dynamic”**

Throughout the prosecution history of the Piles patent—particularly during the prosecution of the ’724 patent<sup>7</sup>—Apple consistently provided the Patent Office with its position about the meaning of “graphical iconic representation” in the context of the asserted claims, and the Patent Office eventually agreed with Apple’s position.

The Patent Office originally rejected the claims on the basis of the Levine reference (U.S. Patent No. 5,060,135),<sup>8</sup> which disclosed using an image of stack of document representations (called ‘stamps’ in Levine) to represent a collection of documents:



<sup>7</sup> The Piles patent is a continuation of U.S. Patent No. 6,243,724, which is a continuation of the now-abandoned application No. 07/876,921.

<sup>8</sup> Smith Decl., Exh. F [Levine patent].

Apple explained to the Patent Office that, unlike the system described in the Piles patent, which allows the user to rifle through the documents icons in the pile, quickly previewing each one, the stacks of the prior art were “dumb” in that only the top document on the stack could be viewed, and all the documents in the stack were treated as a whole. For example, Apple stated:

In many ways, the **Levine system with its stack of stamps represents nothing more than a “dumb” collection of documents without the features of the present invention.** ... [T]here is no disclosure or suggestion in Levine that any of the documents in a collection of documents may be viewed by displaying an indicia of the document. Rather, in Levine, only the document which is the top stamp on the top of a stack can be viewed in a full screen mode by selecting it.

Exh. C [’724 Pros. H.] at 724FH179 (Resp. to Office Action).

[T]he **graphical representation of a collection of document comprises a ‘pile’ of documents that is dynamically altered as documents are added to or removed from the pile,** and the icon for each document in the pile may be selected by positioning the cursor over the icon in the pile. . . . **A user may ‘ruffle’ [sic, rifle] through the documents of the pile** and display indicia of the documents as the user ‘ruffles’ by moving the cursor from document to document within the pile.

Exh. C [’724 Pros. H.] at 724FH274-275 (Appeal Brief).

Levine discloses that the stack of stamps 70 is displayed and manipulated as a **single graphical object.**

Exh. C [’724 Pros. H.] at 724FH300 (Appeal Brief).

When the claims of the ’724 patent issued, Apple’s view that its “graphical representations of a collection of documents” were dynamically browseable was adopted. Citing specifically to Apple’s arguments on Appeal, the Board of Patent Appeals and Interferences found that Levine and the other prior art references did not disclose the browsing functionality that is described and claimed in the Piles patent. *See*

Exh. C [’724 Pros. H.] at 724FH398-399 (Decision on Appeal). The ’724 Patent issued with Claim 6 containing the “a graphical iconic representation of a collection of [a] first plurality of documents” language, which also appears in the asserted claims of the Piles patent. *See* Exh. C at 724FH405-406 (Resp. to Decision on Appeal) (amending claim 84); 724FH408 (Notice of Allowance).

MWT’s contrary proposed construction should be rejected because it contradicts the consistent position that Apple took during prosecution, and that the Patent Office eventually adopted. *See Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 493 F.3d 1358, 1364 (Fed. Cir. 2007) (holding that the proper construction should not ignore the patentee’s “consistent use of [the claim term] throughout the prosecution history”); *Nystrom v. Trex. Co.*, 424 F.3d 1136, 1145 (Fed. Cir. 2005) (finding that the proper construction should not be divorced from the consistent use of the claim term in the written description and prosecution history).

**3. The claim language shows that a “graphical icon representation...” is not static and is not a “picture representing a collection”**

The claim language is specifically directed at allowing a user to scan quickly through the document icons in the displayed pile by sliding a cursor to different positions on the pile to get previews of the different documents in the pile. Claim 1 recites:

1. A method for organizing and viewing information in a computer filing system having a display device and a first plurality of documents, said method comprising:

[1] displaying a graphical iconic representation of a collection of said first plurality of documents;

[2a] displaying a first indicia of a first document of said collection [2b] by selecting a first position from said graphical iconic representation, [2c] wherein said first position on said graphical iconic representation is capable of being at any one of a plurality of locations on said

graphical iconic representation and [2d] wherein said selecting from said graphical iconic representation comprises positioning a cursor on said graphical iconic representation; and

[3] displaying in series [4a] a second indicia of a second document and [5a] a third indicia of a third document [4b] by positioning said cursor first on a second position on said graphical iconic representation [5b] next on a third position on said graphical iconic representation.

Piles patent at claim 1 (sub-numbering added).

Here, the limitations describe how individual documents within the representation of the collection may be selected by placing the cursor at various “positions” along the graphical representation to cause previews to appear that correspond to each respectively selected document. According to the claim, a preview is displayed in response to positioning the cursor over a first position on the representation of the collection [2a and 2b]. Second and third previews are displayed in response to positioning the cursor over second and third positions on the pile [4a-4b and 5a-5b]. This shows that the graphical representation of the collection is responsive to the user’s selection of different document icons in the pile, displaying “indicia” (*e.g.*, a preview) for multiple documents in the pile in response to the cursor touching different positions on the graphical representation. Thus, the graphical iconic representation of the collection cannot be a single, static picture in which the graphical representation is treated as an undifferentiated whole.<sup>9</sup>

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<sup>9</sup> See *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered to determine the ordinary and customary meaning of those terms.”).

#### IV.

##### MEANS-PLUS-FUNCTION ISSUES

The parties agree that the three remaining disputed claim phrases in the Piles patent are written in the “means-plus-function” form.

Means-plus-function elements are governed by 35 U.S.C. § 112, ¶ 6, which requires that such claim limitations “be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” The first step in construing such a limitation is to identify the function.” *E.g. Minks v. Polaris Indus.*, 546 F.3d 1364, 1377 (Fed. Cir. 2008); *Graphon v. Autotrader*, Case No. 05-CV-530, 2007 U.S. Dist. LEXIS 46941 at \*10 (E.D. Tex. 2007) (attached hereto as Smith Decl., Exh. H). “The next step is to identify the corresponding structure in the written description necessary to perform that function.” *Minks*, 546 F.3d at 1377. “Structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.*; *Graphon* at \*10. In other words, “structure disclosed in the specification must be clearly linked to and capable of performing the function claimed by the means-plus-function limitation.” *Default Proof Credit Card Sys. v. Home Depot*, 412 F.3d 1291, 1299 (Fed. Cir. 2005).

The parties agree on the claimed function for the three terms at issue, but disagree as to the corresponding structure for each function. As we explain below, the structures Apple identifies are disclosed in the specification and linked to the functions at issue. By contrast, the structures MWT identifies are purely functional and sometimes include unclaimed limitations.

**A. “means for displaying a graphical iconic representation of a collection of said first plurality of documents”**

<p>“means for displaying a graphical iconic representation of a collection of said first plurality of documents”</p> <p><u>Agreed Function:</u> displaying a graphical iconic representation of a collection of said first plurality of documents.</p>	<p><u>Corresponding structure:</u> executable code that displays the icon representing a collection of documents (<i>i.e.</i>, pile), and equivalents thereof.</p>	<p><u>Corresponding structure:</u> a video display screen, such as a video (CRT) display monitor or a liquid crystal display, and a display controller, coupled to a system bus that receives commands and data from a processor, and structural equivalents.</p>
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**1. The structure identified by Apple is expressly disclosed in the specification and is unambiguously linked to the recited function.**

Claim 5 describes “[a]n apparatus for organizing and viewing information in a computer filing system having a display device and a first plurality of documents, said apparatus comprising...[a] means for displaying a graphical iconic representation...” The Piles patent discloses that the “apparatus of the invention displays graphical representations of a plurality of documents,” such apparatus including “a processing means, such a microprocessor which is coupled to a cursor controlling device, such as a mouse and is coupled to a display means such as a video display screen.” Piles patent at 3:1-3, 3:32-37. This disclosure associates a “video display screen” with the function of displaying. Corroborating this, the Piles patent states that item 19 in Fig. 1—a display screen—is “the display means.” Piles patent at 6:28-29.

The specification further explains, with reference to Figure 1, that there is a “display controller” coupled to both the computer processing means and the display screen, in order to provide images on the display:

display controller 18 [coupled] to the system bus 15 [which] receives commands and data from the processing means 10 and from the memory means 11 via the system

bus 15. The **display controller 18 controls the display device 19 in order to provide images on a display screen 22.** It will be appreciated that the typical computer system includes a bit mapped screen stored in memory, which may be a dedicated frame buffer memory or the system memory. . . . The display means 19 may be any one of a variety of known display systems, such as a video (CRT) display monitor or a liquid crystal display.

Piles patent at 5:62-6:8. This passage associates the function of providing “images on a display screen” with the structure of a “display controller 18” that “receives command and data from the processing means 10.” It further explains that the display screen may be “a video (CRT) display monitor or a liquid crystal display.”

Accordingly, the structure in the specification that is linked to the function of “displaying a graphical iconic representation of a collection of said first plurality of documents” is a video display screen, such as a video (CRT) display monitor or a liquid crystal display, and a display controller, coupled to a system bus that receives commands and data from a processor.

**2. MWT’s proposed construction for its proposed construction is improper because it is purely functional**

MWT’s proposed construction is improper because it is not structure, and is thus not a proper construction of a means-plus-function term. MWT’s proposed corresponding structure adds the phrase “executable code that” onto the functional description “that displays the icon representing a collection of documents (*i.e.*, pile), and equivalents thereof.” However, the law is clear that adding a phrase such as “executable code” onto a functional description does not convert that functional description into structure. As the Federal Circuit explained in *Aristocrat Techs. Ltd. v. Int’l Game Tech*, “[t]he reference to ‘appropriate programming’ imposes no limitation whatever ... [because] the term ‘appropriate programming’ simply references a computer that is programmed so that it performs the function in question.” 521 F.3d 1328, 1334 (Fed. Cir. 2008). The Federal Circuit held as a matter of law that this was an inadequate disclosure

of structure. *Id.* at 1333 (“simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to “the corresponding structure, material, or acts” that perform the function, as required by section 112 paragraph 6.).

The phrase “executable code” is no different than the phrase “appropriate programming” in *Aristocrat Techs.* It imposes no limitation whatsoever; it merely references a computer that is programmed so that it performs the function in question. Accordingly, under the principle explained in *Aristocrat*, MWT’s proposed construction is improper because it recites only function, not structure. *See also Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1382-85 (Fed. Cir. 2009) (rejecting the argument that an “access control manager” could be construed as “any computer-related device or program that performs the function of access control” because that would be purely functional claiming); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366-67 (Fed. Cir. 2008) (“[W]e have consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor.”).

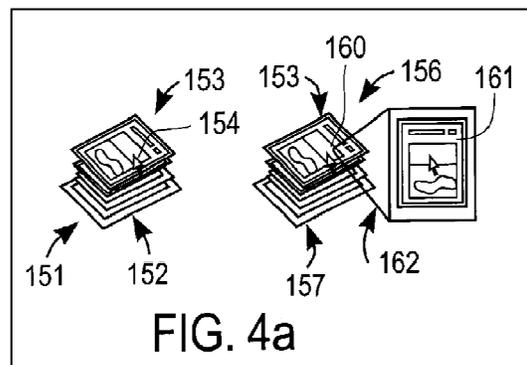
**B. “means for displaying a first indicia of a first document of said collection by selecting a first position from said graphical iconic representation”**

<p>“means for displaying a first indicia of a first document of said collection by selecting a first position from said graphical iconic representation”</p> <p><u>Agreed Function:</u> displaying a first indicia of a first document of said collection by selecting a first position from said graphical iconic representation.</p>	<p><u>Corresponding structure:</u> executable code that initiates browsing of a pile after the cursor has been positioned over the iconic graphical representation of the collection of documents (pile) for a predetermined period of time and displays a first indicia of a first document of the collection (pile) by selecting a first position on the icon representing the collection, and equivalents thereof.</p>	<p><u>Corresponding structure:</u> (a) a video display screen, such as a video (CRT) display monitor or a liquid crystal display, and a display controller, coupled to a system bus that receives commands and data from a processor, and structural equivalents; and (b) an I/O controller to control receiving signals from a cursor control device such as a mouse, and structural equivalents.</p>
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**1. The structure identified by Apple is expressly disclosed in the specification and is plainly linked to the recited function.**

The agreed function of “displaying a first indicia of a first document of said collection by selecting a first position from said graphical iconic representation” has two parts. It requires (a) “displaying a first indicia corresponding to a first document of said collection,” and (b) “selecting a first position from said graphical iconic representation.” Apple’s proposed construction offers corresponding structure for both parts of this function.

The structure for “displaying a first indicia corresponding to a first document of said collection” is the same as the “displaying” structure described in Section III.A above. As explained above, the specification associates a “video display screen” and a “display controller” that “receives command and data from the processing means” with the function of



providing “images on a display screen.” That includes providing images such as a “first indicia of a first document,” as illustrated for example in Figure 4a, which depicts displaying an “indicia” of a document in the view cone to the right of the displayed pile.

The structure for “selecting a first position from said graphical iconic representation” is disclosed to be a “cursor control device, such as mouse.” For example, the specification states:

The **cursor control device**, such as a mouse, typically includes a means for controlling the position of the cursor on the display screen and also includes a signal generation means, such as a switch which is mechanically coupled to a button which is depressed by the user **to signal to the computer to make a selection of an item which is positioned under the cursor.**

Piles patent at 3:37-44; *see also id.* at 12:47-55; 13:2-4. This passage, as well as a passage describing the “point and click” operation of a mouse as a means for selecting items, *id.* at 6:14-64, clearly links the “cursor control device, such as mouse,” to the function of making “a selection of an item which is positioned under the cursor.”<sup>10</sup>

The specification further explains that the cursor control device is connected to the system bus via “the I/O controller 17 which controls the signals received from the keyboard 14 and the mouse 16 and provides those signals, which indicate

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<sup>10</sup> Apple notes that while this claim limitation does not require a means for *generating* the indicia that is displayed, the specification provides a detailed description of the software means for doing so. *See* Piles patent at 10:61-11:11; 24:23-27:14. If the Court is inclined to construe this limitation as requiring structure for performing the function of generating the indicia that are displayed, corresponding structure is disclosed in those passages. Specifically, the specification discloses creating proxies (*i.e.*, indicia) by taking the “full-size reproduction of the document” provided by the document’s application and “miniaturizing” it by using “pixel averaging.” Piles patent at 10:60-11:7. It also discloses creating proxies by using “the most characteristic words” in the document “as indicated by the document’s internal representation,” as well as, for emails, the information in the “to,” “re:” and “date” fields. Piles patent at 10:50-55. The specification also provides a detailed description of an algorithm for calculating the document’s internal representation” which indicates the “most characteristic words” in the document. Piles patent at 24:23-27:14; Fig. 16.

instructions from the user, to the computer system.” *Id.* at 5:58-62. Accordingly, the specification associates the structure of a “cursor control device such as a mouse,” and an “I/O controller,” with the function of “selecting a first position from said graphical iconic representation.”

In sum, the specification supports for Apple’s proposed construction of the corresponding structure for this limitation, and also provides links between those structures and the recited function of “displaying...by selecting.”

**2. MWT’s “support” for its proposed construction is improper because it is purely functional, and because it adds unclaimed limitations**

MWT’s proposed corresponding structure adds the phrase “executable code that” onto the functional description “initiates browsing of a pile after the cursor has been positioned over the iconic graphical representation of the collection of documents (pile) for a predetermined period of time and displays a first indicia of a first document of the collection (pile) by selecting a first position on the icon representing the collection.”

There are two problems with this proposed construction. First, it is not structure, and is thus not a proper construction of a means-plus-function term. As explained above in section III.A, a phrase such as “executable code”—which simply references a computer that is programmed so that it performs the function in question—does not convert a functional description into structure, and is thus improper. *See, e.g., Aristocrat*, 521 F.3d at 1333-34; *Blackboard*, 574 F.3d at 1382-85.

Second, the function MWT recites as being performed by the “executable code” goes well beyond the function recited in the claim. No part of the phrase “initiates browsing of a pile after the cursor has been positioned over the iconic graphical representation of the collection of documents (pile) for a predetermined period of time” appears in the claim. Nor is it somehow necessary to perform the claimed function of “displaying a first indicia of a first document of said collection by selecting a first

position from said graphical iconic representation,” because MWT’s construction also includes a phrase that substantially repeats that function: “displays a first indicia of a first document of *the* collection (*pile*) by selecting a first position on *the icon representing the collection.*” (differences from claim in italics). MWT’s addition of the phrase “initiates browsing of a pile ... for a predetermined period of time” is an improper attempt to add unclaimed functional limitations to the claim, not a recitation of structure that corresponds to the function actually claimed. *See MASS Engineered Design, Inc. v. Ergotron, Inc.*, 559 F. Supp. 2d 740, 747-748 (E.D. Tex. 2009) (“a court may not import functional limitations that are not recited in the claim”) (citing *Wegner Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001)).

Accordingly, MWT’s proposed construction should be rejected.

**C. “means for displaying in series a second indicia of a second document and a third indicia of a third document by positioning said cursor first on a second position on said graphical iconic representation next on a third position on said graphical iconic representation”**

<p>“means for displaying in series a second indicia of a second document and a third indicia of a third document by positioning said cursor first on a second position on said graphical iconic representation next on a third position on said graphical iconic representation”</p> <p><u>Agreed Function:</u> displaying in series a second indicia of a second document and a third indicia of a third document by positioning said cursor first on a second position on said graphical iconic representation next on a third position on said graphical iconic representation.</p>	<p><u>Corresponding structure:</u> executable code that displays in series a second indicia of a second document and a third indicia of a third document by positioning a cursor first on a second position on the icon representing the collection (pile) and next on a third position on the icon representing the collection (pile), and equivalents thereof.</p>	<p><u>Corresponding structure:</u> (a) a video display screen, such as a video (CRT) display monitor or a liquid crystal display, and a display controller, coupled to a system bus that receives commands and data from a processor, and structural equivalents; and (b) an I/O controller to control receiving signals from a cursor control device such as a mouse, and structural equivalents.</p>
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The dispute about this term is substantially identical to the dispute regarding the limitation discussed in the preceding section, III.B: “means for displaying a first indicia....” Like that limitation, the function at issue here has two parts, a “displaying” part and a “selecting” part. With regard to the “displaying” part of the function, the specification associates the structure of a “cursor control device such as a mouse,” and an “I/O controller,” with the function of “displaying in series a second indicia of a second document and a third indicia of a third document” for the same reasons explained in section III.B above in the context of the function “displaying a first indicia of a first document.”

Similarly, with regard to the “selecting” part of the function, the specification associates the structure of a “cursor control device such as a mouse,” and an “I/O controller,” with the function of “positioning said cursor first on a second position on said graphical iconic representation next on a third position on said graphical iconic representation” for the same reasons explained in section III.B above in the context of the function “selecting a first position from said graphical iconic representation.”

Finally, MWT’s proposed corresponding structure is improper. MWT’s proposed corresponding structure adds the phrase “executable code that” onto the functional description “displays in series a second indicia of a second document and a third indicia of a third document by positioning a cursor first on a second position...”. As discussed above, this is not structure, and is thus not a proper construction of a means-plus-function term. As explained above in section III.A, a phrase such as “executable code”—which simply references a computer that is programmed so that it performs the function in question—does not convert a functional description into structure, and is thus improper. *See, e.g., Aristocrat*, 521 F.3d at 1333-34; *Blackboard*, 574 F.3d at 1382-85.

## V.

### CONCLUSION

For the reasons set forth above, Apple’s proposed constructions of the disputed terms of the Piles patent should be adopted.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on this 7th day of December, 2009. As of this date, all counsel of record have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

/s/ Steven S. Cherensky  
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