United States District Court,
S.D. California.

DR SYSTEMS, INC,
Plaintiff/Counterclaim-Defendant.
v.
EASTMAN KODAK COMPANY,
Defendant/Counterclaim-Plaintiff.

No. 08-CV-0669 H(BLM)

Feb. 18, 2009.

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Mark E. Ashton, Sailesh K. Patel, Schiff Hardin LLP, Chicago, IL, Stephen Maxwell Hankins, Schiff Hardin LLP, San Francisco, CA, for Defendant/Counterclaim-Plaintiff.

TENTATIVE CLAIM CONSTRUCTION ORDER FOR UNITED STATES PATENT NUMBER 5,414,811

MARILYN L. HUFF**, District Judge.**

On January 8, 2009 and February 18, 2009, the Court conducted a claim construction hearing in this matter for U.S. Patent No. 5,414,811. Frederick Laney, Allison Goddard and Nicholas Dudziak appeared on behalf of the Plaintiff. Stephen Hankins and Paul Previde appeared on behalf of the Defendant. After due consideration of the briefing and hearing testimony, the Court issues this tentative claim construction order regarding the disputed terms. The parties may submit their responses to the Court's tentative construction no later than **March 4, 2009.** These responses are not to exceed **15 pages** in length. Absent further order, the parties should not reply to each other's responses. If the Court requires further briefing, it will request it.

After reviewing the parties' additional submissions, the Court will issue its final claim construction order including an introduction setting forth the applicable legal standard.

CLAIM 1

(language for which the parties submitted proposed construction in bold)

A method for use with a digital image processing system including a digital database having a plurality of images digitized as image data and stored in respective image data files therein, a plurality of image memories, and an output for coupling thereto an image display device having a screen for display of images, for controlling the display of the images, the method comprising the steps of:

defining the screen to contain a plurality of sections;

selecting a plurality of image data files;

reading image data from the selected plurality of **image data files** and loading the image data into respective **image memories;**

allocating at least two image memories containing image data to at least two sections of the screen, respectively;

displaying the image data from the at least two image memories on the respective screen sections;

selecting a plurality of the images displayed on the screen sections for manipulation; and

manipulating each of the selected images responsive to a single user command so that each selected image is manipulated in the same way at the same time.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"defining the screen to contain a plurality of sections"	A user enters information to create a plurality of screen sections.	Construction unnecessary {Demarcating a plurality of screen sections.}	Demarcating a plurality of screen sections
			[COMMENT-DR's proposed construction limits the claim to requir e user input to divide the screen into sections. See Note 1 below.]
"selecting a plurality of image data files"	A user separately selects at least two individual image data files.	Construction unnecessary {Choosing a plurality of image data files.}	Choosing at least two image data files
			[COMMENT-DR's proposed construction limits the claim to requir e user input to select image data files. See Note 1 below.]
"image data file"	A file containing image data for only one image.	Construction unnecessary {A file containing image data.}	A file containing image data for only one image.
			[COMMENT-This construction is consistent with the patent language. See Note 2 below.]
"image memories"	Two or more memory structures each being dedicated to a	Portions of memory that store an image or images.	Portions of memory each capable of storing one image.

	display device and each capable of storing only one image.		
			[COMMENT-The Court concludes that image memories need not be separate structures, but that each image memory may hold just one image. The central innovation of the invention is a "multiple memory frame store" that can hold more than one image. (2:40-44) Multiple memories are necessary because each image memory holds one image. (2:56-64; 3:24-27; 10:61-63) Nothing in the claims suggests that each image memory is a discrete structure, and nothing in the specification supports that definition or demonstrates an intention to adopt such a limitation.
"allocating at least two image memories containing image data to at least two sections of the screen, respectively"	A display screen that has at least two sections for presenting images and each section is assigned an image memory that holds image data for one image.	Construction unnecessary {Associating portions of memory containing image data with sections of the screen.}	Assigning image memories to respective screen sections
"displaying the image data from the at least two image memories on the respective screen sections"	At least two images are presented on a display device and each image is displayed in a different section of the screen. Each image in a section represents the image data held in the image memory assigned to that screen section.	Construction unnecessary {Displaying the image data contained in the portions of memory on the screen sections with which the memory portions are associated.}	Displaying the image data contained in the portions of memory on the screen sections to which the memory portions are assigned
"selecting a plurality of the images displayed on the screen sections for manipulation"	User separately selects at least two images, which are displayed in different sections of the display screen, for manipulation.	Construction unnecessary {Selecting images displayed on the screen sections for manipulation.}	Selecting at least two images displayed on the screen sections for manipulation.
			[COMMENT-The Court declines to adopt DR's

			proposed limitation requiring user input. See Note 1 below.]
"manipulating each of the selected images responsive to a single user command so that each selected image is manipulated in the same way at the same time"	Manipulating each of the selected images so that the same manipulation is applied to each selected image concurrently (i.e. the applied manipulations do not occur one after the other) without the need for another user command.	Construction unnecessary {Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command.	Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command [COMMENT-DR's proposed construction states that events taking place in rapid succession cannot occur "at the same time." See Note 3 below.]

Note 1: Requiring User Input

Several of DR's proposed constructions read into the claim language a requirement that the user input commands to guide certain steps of the process. DR points out that the patent specification frequently refers to these actions as performed by the user. *See, e.g*. U.S. Patent No. 5,414,811 col.5 l.13-17; col.10 l.56-59. However, though the "specification often describes very specific embodiments of the invention," the Federal Circuit has "repeatedly warned against confining the claims to those embodiments." Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed.Cir.2005). "The written description part of the specification itself does not delimit the right to exclude. That is the function of the patent itself." Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed.Cir.1995) (quoted in Phillips, 415 F.3d at 1312). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." Phillips, 415 F.3d at 1312 (quoting *Innova,* 381 F.3d at 1115. Claim 1 of the '811 patent lists several steps of a process, each beginning with a verb. '811 Patent col. Some of these actions-reading image data, displaying image data-cannot be performed by the user. The final step, however, explicitly mentions a user command. These facts suggest that, where user action is required, the patent so states.

Moreover, the specification states that image reading and loading may be effected "both automatically and in response to a user command." '811 Patent col.3 l.51-54. The specification discloses that the user may control certain functions, but reveals neither a "special definition given to a claim term by the patentee" nor an "intentional disclaimer, or disavowal, of claim scope by the inventor" requiring user input. Phillips, 415 F.3d at 1317. Instead, it explicitly states that the invention is not limited to the embodiment described in the specification. '811 Patent col. 13 l.46-50. Accordingly, reading and interpreting Claim 1 "in light of the specifications," the Court declines to impose DR's proposed limitations. Phillips, 415 F.3d at 1316 (quoting United States v. Adams, 383 U.S. 39, 49, 86 S.Ct. 708, 15 L.Ed.2d 572 (1966)).

Note 2: "Image Data File"

The claims and specification of the '811 patent makes frequent use of the term "image data file." "[A]t all times, the language of the claims governs their scope and meaning." SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331, 1338-39 (Fed.Cir.2005). "The words of a claim are generally given their ordinary and customary meaning." Phillips, 415 F.3d at 1312 (internal citation omitted). The '811 patent claims a method for use with a database containing multiple "images digitized as image data and stored in respective image data files." U.S. Patent No. 5,414,811 col. 13 l.56-59. The Court concludes that claim 1 of the patent refers to multiple images, each of which is stored in an individual image data file.

Moreover, a disputed term must be construed "consistently with its appearance in other places in the same claim or in other claims of the same patent." Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed.Cir.2001). Claim 20 of the '811 patent claims a method for "reading a selected image data file representing such input image from the digital database." '811 Patent col. 18 l.33-34. Because this claim speaks of an image data file as representing a single image, it is consistent with the Court's interpretation of the term.

In addition to the claims themselves, the patent specification is "always highly relevant to the claim construction analysis. Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed.Cir.2005). Although it is "unacceptable to import limitations into a claim from the written description," the person of ordinary skill "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Chamberlain Group, Inc. v. Lear Corp., 516 F.3d 1331, 1336 (Fed.Cir.2008); Phillips, 415 F.3d at 1313 (quoted in Netcraft Corp. v. eBay, Inc., 549 F.3d 1394, 1396-97 (Fed.Cir.2008)). Here, language in the patent specification also clarifies the relationship between image and file. The summary states that "each image data file correspond[s] to each of the images." '811 Patent col.3 l.9-10. Thus, the patent demonstrates the relationship between one image and one image data file.

Note 3: "At the Same Time"

Claim 1 states that multiple images are displayed and manipulated "at the same time" responsive to a single user command. U.S. Patent No. 5,414,811 col.14 l.8-11. DR argues that this claim would not apply to a system performing these actions in sequence, even if the actions appear simultaneous to the user. DR's suggests the term "concurrently" to clarify the Patent's "at the same time" language. The word "concurrently" is found in a different context in Claims 15 and 16 of the patent, but not in Claim 1. If "concurrently" is more exacting than "at the same time," the Court will not use it in construing Claim 1. To do so would be to read limitations into one claim from other claims. The Federal Circuit has held that such constructions are erroneous as a matter of law. SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1122 (Fed.Cir.1985).

CLAIM 2

(language for which the parties submitted proposed construction in bold)

A method as recited in claim 1 wherein:

the screen includes a two-dimensional array of screen pixels arranged in rows and columns; and

the step of defining includes selecting a plurality of subsets of the screen pixels, by row and column.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"the step of defining includes selecting a plurality of subsets of the screen pixels, by row and column"	User defines two or more areas of the display screen by selecting two or more sections by row and by column.	Construction unnecessary {The defining step includes selecting two or more screen sections, by row and column.}	The defining step includes selecting two or more screen sections, by row and column. [COMMENT-The Court declines to adopt DR's proposed limitation requiring user input. See Note 1 above.]

CLAIM 5

(language for which the parties submitted proposed construction in bold)

A method as recited in claim 3 wherein the step of manipulating includes **decimating the image data.**

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"decimating the image data"	Reducing the size of the image (Agreed)	[COMMENT-The Court accepts the parties' stipulated construction.]	Reducing the size of the image

CLAIM 6

(language for which the parties submitted proposed construction in bold)

A method as recited in claim 3 wherein the step of manipulating includes **cropping the image data.**

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"cropping the image data"	Displaying one or more portions of the image (Agreed)	[COMMENT-The Court accepts the parties' stipulated construction.]	Displaying one or more portions of the image

CLAIM 7

(language for which the parties submitted proposed construction in bold)

A method as recited in claim 3 wherein the step of manipulating includes **zooming the image.**

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"zooming	Enlarging or reducing an image or one or more		Enlarging or reducing an image or one

the image"	portions of the image (Agreed) [COMMENT-The Court accepts the parties' stipulated construction.]	or more portions of the image

CLAIM 8

(language for which the parties submitted proposed construction in bold)

A method as recited in claim 4 wherein the step of manipulating includes **panning the image.**

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"panning the image"	Scrolling the image or one or more portions of the image into or out of view (Agreed) [COMMENT-The Court accepts the parties' stipulated construction.]		Scrolling the image or one or more portions of the image into or out of view

CLAIM 10

(language for which the parties submitted proposed construction in bold)

An apparatus, useful with a system including a digital database that store sequentially adjacent image data files containing digitized image date a corresponding to input images, for controlling the manner in which the digitized image data is accessed from the image data files in the digital database and provided to an output of the apparatus for display on an image display device, said apparatus comprising:

a plurality of image memories for storing digitized image data read from the database;

user command means for registering user commands, including a particular read command to read and display a selected image data file from the database and a subsequent user command to read and to display a sequentially adjacent image data file; and

control means responsive to the particular read command for reading the selected image data file and storing the corresponding image data in one of the image memories for subsequent display on the display device, wherein said control means is further responsive to said particular read command for reading one or more image data files sequentially adjacent to the selected image data file and storing the corresponding one or more sequentially adjacent digitized image data in one or more of the remaining image memories without displaying said sequentially adjacent data files until said subsequent user command is registered, whereby access time to display the sequentially adjacent image file pursuant to said subsequent user command is shortened because the sequentially adjacent image file has already been read from the database into one of said image memories.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"user command means for registering user commands, including a particular read command to read and	Subject to 35 U.S.C. s. 112 para. 6	Subject to 35 U.S.C. s. 112 para. 6	Function-Registering user commands

display a selected image data file from the database and a subsequent user command to read and to display a sequentially adjacent image data file"			
	Function-Registering user commands (Agreed)	Function-Registering user commands (Agreed)	Structure-input-output device capable of performing the function, including a keyboard, IR remote control unit, or selector switches of a cabinet-resident control panel
	Structure-keyboard, IR remote control unit, selector switches of cabinet-resident control panel	Structure-input-output device, including a keyboard, IR remote control unit, or selector switches of a cabinet-resident control panel	[COMMENT-The specification states that "the user enters a command by way of an I/O device (e.g. keyboard, IR remote control unit) to view a selected image...." (1:67) In response to DR's argument that some input-output devices are incapable of performing this function, the Court has limited its construction to exclude such devices. A means-plus-function claim is construed to cover the corresponding structure and "equivalents thereof." 35 U.S.C. s. 112. The Court declines to limit this claim to a finite list of devices in light of the language in the claim and specification.]
"control means responsive to the particular read command for reading the selected image data file and storing the corresponding image data in one of the image memories for subsequent display on the display device, wherein said control means is further responsive to said particular read command for reading one or more image data files sequentially adjacent to the selected image data	Subject to 35 U.S.C. s. 112 para. 6	Subject to 35 U.S.C. s. 112 para. 6	Function-Reading a selected image data file into a portion of memory, and reading one or more image files that are sequentially adjacent to the first image file into other portions of memory, and not displaying the sequentially adjacent image files until another user command is received.

file and storing the corresponding one or more sequentially adjacent digitized image data in one or more of the remaining image memories without displaying said sequentially adjacent data files until said subsequent user command is registered"			
	Function-In response to a first user input identifying a first image data file that the user wants displayed, the corresponding image data file is retrieved from the database. The data contained in the file for the first image is stored in one of the multiple image memories.	Function-Construction unnecessary {Reading a selected image data file into a portion of memory, and reading one or more image files that are in sequence with the first image file into other portions of memory, and not displaying the image files until another user command is received.}	Structure-Memory controller, microcontroller and associated programming.
	In response to the first user input identifying a first image data file that the user wants displayed, the image data file(s) corresponding to image(s) immediately before and/or immediately after the first image are retrieved from the digital database, but no other image data files are retrieved. The data contained in the image	Structure-memory controller, microcontroller and associated programming.	[COMMENT-The Court declines to adopt a construction requiring user input identifying the first image to be displayed. See Note 1 above.

	data file for each image immediately before and/or immediately after the first image data file is stored in its own image memory which is separate and apart from the image memory holding the first image data file.	
	The image(s) immediately before and/or immediately after the first image picked by the user is not displayed until a subsequent user input occurs.	DR's proposed construction limits the phrase "sequentially adjacent" to include only the image immediately preceding the selected image and the image immediately following the selected image. However, the claim language indicates that "one or more" sequentially adjacent image data files are preloaded-not "one or two." Further, the specification describes an embodiment with the capability of storing four image data files in short term memory. (8:59-66) DR's proposed construction would render one of these image memories superfluous for this function. Accordingly, the Court concludes that "sequentially adjacent" is not limited to two images.
	Structure-Insufficiently disclosed	As to DR's argument that structure is insufficiently disclosed, see Note 4 below.]

Note 4: Definiteness of Means-Plus-Function Claims

"The first step in analyzing a claim written in means-plus-function form is to identify the claimed function." Lockheed Martin Corp. v. Space Sys./ Loral, Inc., 324 F.3d 1308, 1318 (Fed.Cir.2003). Next, the court must "look to the written description to identify the structure corresponding to the function." Id. at 1320. A claim that fails to adequately disclose a structure in the specification that performs the claimed function is indefinite and invalid. Budde v. Harley-Davidson, Inc.., 250 F.3d 1369, 1376 (Fed.Cir.2001). A patent challenger arguing insufficient disclosure must show by clear and convincing evidence "that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function." Id. at 1376-77.

The Federal Circuit has held that a patentee must disclose more than a "general purpose computer as the structure designed to perform that [claimed] function." Aristocrat Tech. Australia Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1333 (Fed.Cir.2008). DR argues that the patent's failure to disclose any algorithm or specific programming renders its means-plus-function claims indefinite and invalid. However, sufficiency of structure disclosure is assessed from the viewpoint of one skilled in the art. AllVoice Computing PLC v. Nuance Commc'ns, Inc., 504 F.3d 1236, 1240 (Fed.Cir.2007). In *AllVoice,* the Federal Circuit held that the patentee need not disclose specific program code and the internal circuitry of an electronic device if one of ordinary skill in the art would understand what program to use and how to build the device. *Id*. at 1245. Kodak maintains that the patent discloses sufficient structure and that one skilled in the art would understand that structure. The Court notes that there is no pending summary judgment motion raising this issue.

CLAIM 15

(language for which the parties submitted proposed construction in bold)

A method, for use with a digital image processing system including a digital database having a plurality of images digitized as image data and stored in respective image data files therein, said image data including a plurality of image data pixels, each image data pixel having a row and column associated therewith, a plurality of image memories, and an output for coupling thereto an image display device having a screen for display of images, such display including a two-dimensional array of screen pixels arranged in rows and columns, the method comprising the steps of:

defining the screen to contain a plurality of sections, each section including a plurality of subsets comprising rows and columns of screen pixels;

selecting a plurality of image data files;

reading image data from the selected plurality of image data files and loading the image data into respective image memories;

allocating at least two image memories containing image data to at least two sections of the screen, respectively;

displaying the image data from the at least two image memories on the respective screen sections by mapping the image data pixels onto the screen pixels of the respective screen section, by row an column;

selecting a plurality of the images displayed on the screen for manipulation; and

manipulating each of the selected images in response to a single user command so that all of the selected images are manipulated in the same way at the same time, said manipulating step comprising the step of zooming the image by defining, by minimum and maximum row and minimum and maximum column, a subset of the image data, redefining the subset by one of (a) increasing the minima and decreasing the maxima, and (b) decreasing the minima and increasing the maxima, incrementally over a period of time responsive to a user command, and displaying the subset, in accordance with the changing definition of the minima and maxima of the subset, concurrently with the time period over which the minima and maxima are redefined.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"manipulating each of the selected images in response to a single user command so that all of the selected images are manipulated in the same way at the same time"	Manipulating each of the selected images so that the same manipulation is applied to each selected image concurrently (i.e. the applied manipulations do not occur one after the other) without the need for another user command.	Construction unnecessary {Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command.}	Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command
			[COMMENT-DR's proposed construction states that events taking place in rapid succession cannot occur "at the same time." See Note 3 below.]
"said manipulating step comprising the step of zooming the image by defining, by minimum and maximum row and minimum and maximum column, a subset of the image data, redefining the subset by one of (a) increasing the minima and decreasing the maxima, and (b) decreasing the minima and increasing the maxima, incrementally over a period of time responsive to a user command, and displaying the subset, in accordance with the changing definition of the minima and maxima of the subset, concurrently with the time period over which the minima and maxima are redefined"	The manipulating step includes a panning operation, which can either (a) pan down, (b) pan up, (c) pan right, or (d) pan left. The panning operation is carried out over time as the user performs the panning command and the image is concurrently redisplayed as the panning is being performed.	Construction unnecessary {Panning each of the selected images in response to a single user command. Panning can be (a) down, (b) up, (c) right, or (d) left. The panning operation is carried out over time as the user performs a command, and the image is redisplayed as the panning is performed over the same period of time.	The manipulating step includes a panning operation, which can pan all selected images (a) down, (b) up, (c) right, or (d) left. The panning operation is carried out over time as the user performs a command and the image is concurrently redisplayed as the panning is being performed. [COMMENT-The Court declines to adopt DR's proposed

limitation that the panning operation occurs only in response to the user's "panning command." This limitation is not contained in the claim language, nor is it indicated by the specification.]

CLAIM 16

(language for which the parties submitted proposed construction in bold)

A method, for use with a digital image processing system including a digital database having a plurality of images digitized as image data and stored in respective image data files therein, said image data including a plurality of image data pixels, each image data pixel having a row and column associated therewith, a plurality of image memories, and an output for coupling thereto an image display device having a screen for display of images, such display including a two-dimensional array of screen pixels arranged in rows and columns, the method comprising the steps of:

defining the screen to contain a plurality of sections, each section including a plurality of subsets comprising rows and columns of screen pixels;

selecting a plurality of image data files;

reading image data from the selected plurality of image data files and loading the image data into respective image memories;

allocating at least two image memories containing image data to at least two sections of the screen, respectively;

displaying the image data from the at least two image memories on the respective screen sections by mapping the image data pixels onto the screen pixels of the respective screen section by row an column;

selecting a plurality of the images displayed on the screen for manipulation; and

manipulating each of the selected images in response to a single user command so that all of the selected images are manipulated in the same way at the same time, said manipulating step comprising the step of panning the image by defining, by minimum and maximum row and minimum and maximum column, a subset of the image data, redefining the subset by one of (a) increasing the row minimum and maximum, (b) decreasing the row minimum and maximum, (c) increasing the column minimum and maximum, and (d) decreasing the column minimum and maximum, incrementally over a period of time responsive to a user command, and displaying the subset, in accordance with the changing definition of the minima and maxima of the subset, concurrently with the time period over which the minima and maxima are redefined.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"manipulating each of the selected images in response to a single user command so that all of the selected images are manipulated in the same way at the same time"	Manipulating each of the selected images so that the same manipulation is applied to each selected image concurrently (i.e. the applied manipulations do not occur one after the other) without the need for another user command.	Construction unnecessary {Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command.	Manipulating each of the selected images so that the same manipulation is applied to each selected image at the same time without need for another user command
			[COMMENT-DR's proposed construction states that events taking place in rapid succession cannot occur "at the same time." See Note 3 below.]
"said manipulating step comprising the step of panning the image by defining, by minimum and maximum row and minimum and maximum column, a subset of the image data, redefining the subset by one of (a) increasing the row minimum and maximum, (b) decreasing the row minimum and maximum, (c) increasing the column minimum and maximum, and (d) decreasing the column minimum and maximum, incrementally over a period of time responsive to a user command, and displaying the subset, in accordance with the changing definition of the minima and maxima of the subset, concurrently with the time period over which the minima and maxima are redefined"	The manipulating step includes a panning operation, which can either (a) pan down, (b) pan up, (c) pan right, or (d) pan left. The panning operation is carried out over time as the user performs the panning command and the image is concurrently redisplayed as the panning is being performed.	Construction unnecessary {Panning each of the selected images in response to a single user command. Panning can be (a) down, (b) up, (c) right, or (d) left. The panning operation is carried out over time as the user performs a command, and the image is redisplayed as the panning is performed over the same period of time.	The manipulating step includes a panning operation, which can pan all selected images (a) down, (b) up, (c) right, or (d) left. The panning operation is carried out over time as the user performs a command and the image is concurrently redisplayed as the panning is being performed.

[COMMENT-The Court declines to adopt DR's proposed limitation that the panning operation occurs only in response to the user's "panning command." This limitation is not contained in the claim language, nor is it indicated by the specification.]

CLAIM 17

(language for which the parties submitted proposed construction in bold)

An apparatus, useful with a system including a digital database that stores sequentially adjacent image data files containing digitized image data corresponding to input images, for controlling the manner in which the digitized image data is accessed from the image data files in the digital database and provided to an output of the apparatus for display on an image display device, said apparatus comprising:

a plurality of image memories for storing digitized image data read from the database;

user command means for registering user commands, including a particular read command to read and display a selected image data file from the database and a subsequent user command to read and to display a sequentially adjacent image data file;

control means responsive to the particular read command for reading the selected image data file and storing the corresponding image data in one of the image memories for subsequent display on the display device, wherein said control means is further responsive to said particular read command for reading one or more image data files sequentially adjacent to the selected image data file and storing the corresponding one or more sequentially adjacent digitized image data in one or more of the remaining image memories, whereby access time to display the sequentially adjacent image file pursuant to said subsequent user command is shortened because the sequentially adjacent image file has already been read from the database into one of said image memories; and

means for controllably generating border image signals representative of image characteristics of at least one border region to be combined with the image data, and for coupling the border image signals to the image display device so that the image reproduced thereby is bound by the at least one border region.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"control means responsive to the particular read command	Function-In response to a first user input	Function-Construction	Function-Reading a selected image data file into a portion

for reading the selected image data file and storing the corresponding image data in one of the image memories for subsequent display on the display device, wherein said control means is further responsive to said particular read command for reading one or more image data files sequentially adjacent to the selected image data file and storing the corresponding one or more sequentially adjacent digitized image data in one or more of the remaining image memories, whereby access time to display the sequentially adjacent image file pursuant to said subsequent user command is shortened because the sequentially adjacent image file has already been read from the database into one of said image memories"	identifying a first image data file that the user wants displayed, the corresponding image data file is retrieved from the database. The data contained in the file for the first image is stored in one of the multiple image memories.	unnecessary {Control means for reading a selected image into a portion of memory; the control means is responsive to a command for reading one or more image files that are in sequence with the first image file into other portions of memory.}	of memory, and reading one or more image files that are sequentially adjacent to the first image file into other portions of memory.
	In response to the first user input identifying a first image data file that the user wants displayed, the image data file(s) corresponding to image(s) immediately before and/or immediately after the first image are retrieved from the digital database, but no other image data files are retrieved. The data contained in the image data file for each image immediately before and/or immediately after the first image data file is stored in	Structure-memory controller, microcontroller and associated programming.	Structure-Memory controller, microcontroller and associated programming.

	its own image memory which is separate and apart from the image memory holding the first image data file.		
	The image(s) immediately before and/or immediately after the first image picked by the user is not displayed until a subsequent user input occurs.		[COMMENT-The Court declines to adopt a construction requiring user input identifying the first image to be displayed. See Note 1 above.
	Structure-Insufficiently disclosed		DR's proposed construction limits the phrase "sequentially adjacent" to include only the image immediately preceding the selected image and the image immediately following the selected image. However, the claim language indicates that "one or more" sequentially adjacent image data files are preloaded-not "one or two." Further, the specification describes an embodiment with the capability of storing four image data files in short term memory. (8:59-66) DR's proposed construction would render one of these image memories superfluous for this function. Accordingly, the Court concludes that "sequentially adjacent" is not limited to two images.
			As to DR's argument that structure is insufficiently disclosed, see Note 4 above.]
"means for controllably generating border image signals representative of image characteristics of at least one border region to be combined	Subject to 35 U.S.C. s. 112 para. 6	Subject to 35 U.S.C. s. 112 para. 6	Function-controllably generating border image signals representative of image characteristics of at least one border region to be

with the image data, and for coupling the border image signals to the image display device so that the image reproduced thereby is bound by the at least one border region"			combined with the image data, and coupling the border image signals to the image display device.
	Function-controllably generating border image signals representative of image characteristics of at least one border region to be combined with the image data, and for coupling the border image signals to the image display device so that the image reproduced thereby is bound by the at least one border region.	Function-controllably generating border image signals representative of image characteristics of at least one border region and coupling the border image signals to the image display device.	Structure-border generator
	Structure-insufficiently disclosed	Structure-border generator	[COMMENT-The Court excludes the claim language beginning with "so that ..." because a "clause that merely states the result of the limitations in the claim adds nothing to the substance of the claim" and is not properly part of the function. *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1319 (Fed.Cir.2003).
			As to DR's argument that structure is insufficiently disclosed, see Note 4 above.]
"border image signals"	Signals that represent image characteristics of at least one border region.	Signals which produce a border around an image.	Signals which produce a border around an image.
			[COMMENT-At the hearing, DR stipulated to Kodak's construction. The Court accepts the parties' stipulated construction.]

"border region"	An area within the image that is located near the periphery of that image.	An area at the periphery of the image where a border appears.	An area at the periphery of the image where a border appears. [COMMENT-At the hearing, DR stipulated to Kodak's construction. The Court accepts the parties' stipulated construction.]

CLAIM 18

(language for which the parties submitted proposed construction in bold)

An apparatus, useful with a system including a digital database that stores sequentially adjacent image data files containing digitized image data corresponding to input images, for controlling the manner in which the digitized image data is accessed from the image data files in the digital database and provided to an output of the apparatus for display on an image display device, said apparatus comprising:

a plurality of image memories for storing digitized image data read from the database;

user command means for registering user commands, including a particular read command to read and display a selected image data file from the database and a subsequent user command to read and to display a sequentially adjacent image data file; and

control means responsive to the particular read command for reading the selected image data file and storing the corresponding image data in one of the image memories for subsequent display on the display device, wherein said control means is further responsive to said particular read command for reading one or more image data files sequentially adjacent to the selected image data file and storing the corresponding one or more sequentially adjacent digitized image data in one or more of the remaining image memories, whereby access time to display the sequentially adjacent image file pursuant to said subsequent user command is shortened because the sequentially adjacent image file has already been read from the database into one of said image memories, and wherein said control means comprises **means for controllably reading image data files from the database in a first selected order;** and **means for loading image data from the thus read image data files into respective ones of the plurality of image memories in a second selected order.**

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"means for controllably reading image data files from the database in a first selected order"	Subject to 35 U.S.C. s. 112 para. 6	Subject to 35 U.S.C. s. 112 para. 6	Function-controllably reading image data files from the database in a first selected order.
	Function-controllably reading image data files from the database in a	Function-controllably reading image data files from the database in a	Structure-memory controller, microcontroller and

	first order selected by a user.	first selected order.	associated programming.
	Structure-insufficiently disclosed	Structure-Memory controller, microcontroller and associated programming.	[COMMENT-The Court declines to adopt DR's proposed limitation requiring user input. See Note 1 above.
			As to DR's argument that structure is insufficiently disclosed, see Note 4 above.]
"means for loading image data from the thus read data files into respective ones of the plurality of image memories in a second selected order"	Subject to 35 U.S.C. s. 112 para. 6	Subject to 35 U.S.C. s. 112 para. 6	Function-loading image data from the thus read image data files into respective ones of the plurality of image memories in a second selected order.
	Function-loading image data from the thus read image data files into respective ones of the plurality of image memories in a second order selected by the user.	Function-loading image data from the thus read image data files into respective ones of the plurality of image memories in a second selected order.	Structure-Memory controller, microcontroller and associated programming.
	Structure-insufficiently disclosed	Structure-Memory controller, microcontroller and associated programming.	[COMMENT-The parties agree as to function and the Court adopts their construction. As to DR's argument that structure is insufficiently disclosed, see Note 4 above.]

CLAIM 19

(language for which the parties submitted proposed construction in bold)

An apparatus as recited in claim 18 wherein said control means further includes:

means for arranging the image data files in the database into a predetermined sequence which defines the selected order in which the image data files are to be read.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"means for arranging	Subject to 35 U.S.C. s.	Subject to 35 U.S.C. s.	Function-arranging the

the image data files in the database into a predetermined sequence which defines the selected order in which the image data files are to be read"	112 para. 6	112 para. 6	image data files in the database into a predetermined sequence which defines the selected order in which the image data files are to be read
	Function-arranging the image data files in the database into a predetermined sequence which defines the selected order in which the image data files are to be read	Function-arranging the image data files in the database into a predetermined sequence which defines the selected order in which the image data files are to be read	Structure-Memory controller, microcontroller, and associated programming.
	Structure-Insufficiently disclosed	Structure-Memory controller, microcontroller, and associated programming.	[COMMENT-The Court adopts the parties' agreed function construction. As to DR's argument that structure is insufficiently disclosed, see Note 4 above.]

CLAIM 20

(language for which the parties submitted proposed construction in bold)

A method for controlling the manner in which digitized image data is accessed from a plurality of image data files in a digital database in order to display such digitized image data on an image display device, said database containing image data files representing a plurality of sequentially adjacent input images, said method comprising the steps of:

providing a plurality of image memories for storing digitized image data read from the database;

in response to a **read command** signaling a desire to display a selected input image on the display device, **reading a selected image data file representing such input image from the digital data base, storing the corresponding digitized image data in one of the image memories, and displaying the input image represented by the so stored digitized image data on the display device;** and

in response to the same read command, **reading one or more additional image files representing input images that are sequentially adjacent to the input image represented by the selected image data file and storing the corresponding digitized image data in one or more of the remaining image memories without displaying the sequentially adjacent input images until a subsequent user command is registered,** whereby access time to display a sequentially adjacent input image pursuant to a subsequent user command is shortened because the corresponding sequentially adjacent image file has already been

read from the database and stored in one of the additional image memories.

Claim Language	DR Systems	Eastman Kodak	Court's Construction
"read command"	A user input identifying a specific image that the user wants to display on the display device.	Construction unnecessary. {A command to retrieve{	A user input identifying a specific image that the user wants to display on the display device.
			[According to the claim language, the read command "signal[s] a desire to display a selected input image on the display device." Because a device is incapable of having such a desire, the Court concludes that the "read command" requires user input.]
"reading a selected image data file representing such input image from the digital data base, storing the corresponding digitized image data in one of the image memories, and displaying the input image represented by the so stored digitized image data on the display device"	The corresponding image data file for the first image is retrieved from the digital database. The image data contained in the file for the first image is stored in one of the image memories. The first image represented by the image data is displayed on the display screen.	Construction unnecessary {Reading an image data file from the digital database, storing the image data in memory, and displaying the image.}	Reading an image data file from the digital database, storing the image data in memory, and displaying the image.
"reading one or more additional image files representing input images that are sequentially adjacent to the input image represented by the selected image data file and storing the corresponding digitized image data in one or more of the remaining image memories without displaying the sequentially adjacent input images until a	The image data file(s) corresponding to the image(s) immediately before and/or after the first image is retrieved from the digital database, but no other images are received. The data contained in the file for each image immediately before and/or after the first image is stored in its own image memory. The images immediately before and/or immediately after the first image selected by the user is not displayed	Construction unnecessary. {Reading one or more additional image files that are in sequence with the first selected image, and storing the images in memory without displaying them until another user	Reading a selected image data file into a portion of memory, and reading one or more image files that are sequentially adjacent to the first image file into other portions of memory, and not displaying the sequentially adjacent image files until another user command is received.

subsequent user command is registered"	until a subsequent user input occurs.	command occurs.}	

[COMMENT-DR's proposed construction limits the phrase "sequentially adjacent" to include only the image immediately preceding the selected image and the image immediately following the selected image. However, the claim language indicates that "one or more" sequentially adjacent image data files are preloaded-not "one or two." Further, the specification describes an embodiment with the capability of storing four image data files in short term memory. (8:59-66) DR's proposed construction would render one of these image memories superfluous for this function. Accordingly, the Court concludes that "sequentially adjacent" is not limited to two images.]

Conclusion

The parties may submit their responses to the Court's tentative construction no later than **March 4, 2009.** These responses are not to exceed **15 pages** in length. Absent further order, the parties should not reply to each other's responses. If the Court requires further briefing, it will request it.

After reviewing the parties' additional submissions, the Court will issue its final claim construction order including an introduction setting forth the applicable legal standard.

IT IS SO ORDERED.

S.D.Cal.,2009.
DR Systems Inc. v. Eastman Kodak Co.