

## APPENDIX A

**U.S. Patent No. 7,765,482 (the “’482 Patent”), Claim 1, is anticipated and/or obvious in light of U.S. Patent No. 7,315,386 (“Shiimori”)**

U.S. Patent No. 7,315,386 (“Shiimori”) was filed on June 30, 1998, predating the filing date of the ’482 Patent.

U.S. Patent No. 7,765,482 (the “’482 Patent”)	U.S. Patent No. 7,315,386 (“Shiimori”)
Claim 1	
1. A computer implemented method of pre-processing digital content in a client device for subsequent electronic publishing, comprising:	<p>Shiimori discloses a computer implemented method of pre-processing digital content in a client device for subsequent electronic publishing.</p> <p><i>See, e.g.:</i></p> <p>In a system in which an editing server and a plurality of client computers are capable of communicating with one another, <u>an edited image can be generated by the plurality of client computers.</u></p> <p>(Abstract) (emphasis added)</p>

Invalidity Scenario 1

As shown in the following quotes and screenshots, the client computer of Shiimori receives a template image from the image server. The client computer processes image data according to the received template information, sending the composite image to the main image server to be printed.

*See, e.g.:*

A client computer and a main image server are connected to each other. A user image to be synthesized on a template image is read in the client computer. Image data representing the template image used for the image synthesis and image data representing a mask image are transmitted from the main image server to the client computer. In the client computer, image synthesis processing is performed. Image data representing an area required for image synthesis of the user image used for the image synthesis is extracted. The extracted user image data and synthesis information required for the synthesis are transmitted from the client computer to the main image server. In the main image server, a composite image is printed.

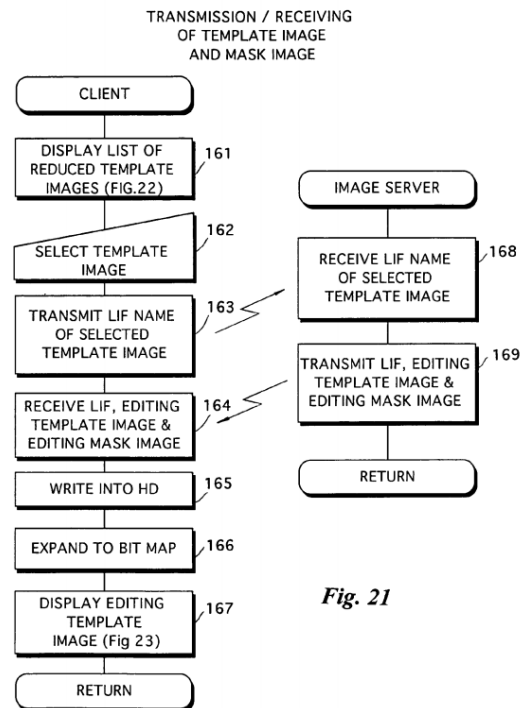
(Abstract, discussing image data processing according to a received template) (emphasis added)

Invalidity Scenario 2

As shown in the following quotes and screenshots, the client computer of Shiimori reduces the resolution and quantity of image data to be transmitted to the image server according to constraints of the main image server's printer.

	<p><i>See, e.g.:</i></p> <p>A fourth embodiment of the [sic] is directed to a <u>client computer</u> used in an image communication system in which an image server having an image output device for outputting an image and the client computer are capable of communicating with each other, comprises <u>image data quantity reduction device (means) for reducing the data quantity of image data to be transmitted to the image server such that the data quantity of the image data to be transmitted is equal to or less than the data quantity of the image data representing the image to be outputted from the image output device</u>, and image data transmission device (means) for transmitting to the image server the image data whose data quantity is reduced by the image data quantity reduction device.</p> <p>(6:8-20, discussing reduction of image resolution and quantity of data in preparation for transmission) (emphasis added)</p>
<p>(a) receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of digital content, said digital content including one or more of image content, video content, and audio content;</p>	<p>Shiimori discloses receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of digital content, said digital content including one or more of image content, video content, and audio content.</p> <p><u>Invalidity Scenario 1</u></p> <p>The client computer of Shiimori receives a template image from the image server. The client computer processes image data according to the received template information.</p>

See, e.g.:



**Fig. 21**

(Figure 21, outlining transfer of template image data)

In the image communication system, template image data representing a template image (editing template image data and printing template image data having a higher resolution than that of the editing template image data) is stored in the main image server **30**. User image data representing a user image or user images is stored in the client computer **40**. The editing template image data is transmitted from the main image server **30** to the client computer **40**. In the client computer **40**, the user image represented by the user image data is synthesized on the template image represented by the transmitted editing template image data.

(23:59-24:2, discussing transfer of template image data) (emphasis added)

When the client computer **40** and the main image server **30** are connected to each other, editing template image data representing an editing template image is read out of the hard disk in the main image server **30**, and is transmitted from the main image server **30** to the client computer **40** (step **133**).

(25:45-50, discussing transfer of template image data)

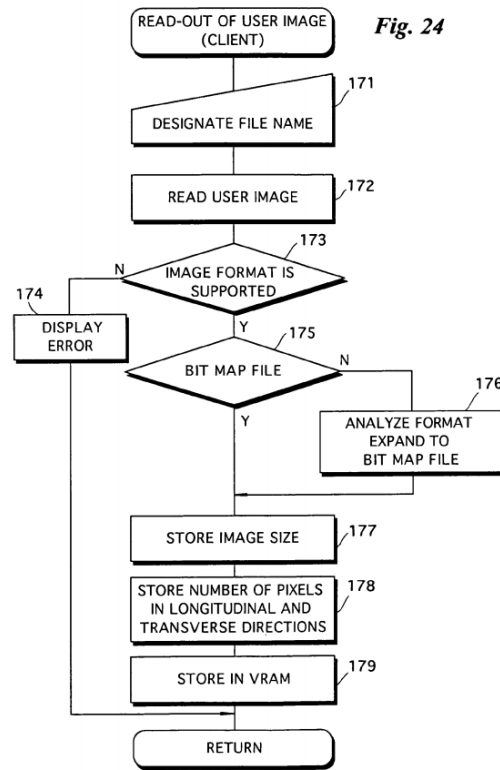
The LIF, the editing template image data and the editing mask image data which have been transmitted from the main image server **30** are received by the client computer **40** (step **164**). The LIF, the editing template image data and the editing mask image data which have been received are temporarily written into the hard disk by the HD drive **94** (step **165**).

(27:4-10, discussing transfer of LIF, template image data, and mask image data)

	<p><u>Invalidity Scenario 2</u></p> <p>The client computer of Shiimori uses the resolution of the main image server's high quality printer for image processing. This resolution information is stored in the memory of the client computer.</p> <p><i>See, e.g:</i></p> <p>The resolution of the high-quality printer <b>90A</b> of the main image server <b>30</b> has been stored in the hard disk of the client computer <b>40</b>. The resolution of the high-quality printer <b>90A</b> is read out of the hard disk of the client computer <b>40</b> (step <b>211</b>). The resolution of the high-quality printer <b>90A</b> and the resolution of user image used in the composite image are compared with each other (step <b>212</b>).</p> <p>(30:7-13)</p> <p>It would be obvious to one skilled in the art to send this resolution information from the main image server to the client computer, in order for it to be stored in the memory of the client computer.</p>
(b) receiving an identification of a group of one or more items of digital content for transmission, a collective digital	Shiimori discloses receiving an identification of a group of one or more items of digital content for transmission, a collective digital content of said group of one or more items of digital content being limited by said received pre-processing parameters.

content of said group of one or more items of digital content being limited by said received pre-processing parameters;

See, e.g.:



(Figure 24, outlining read-out processing of user image)

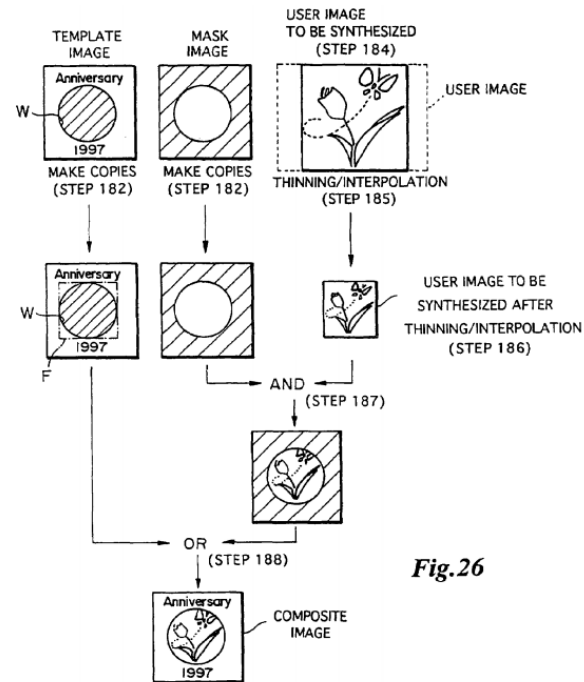
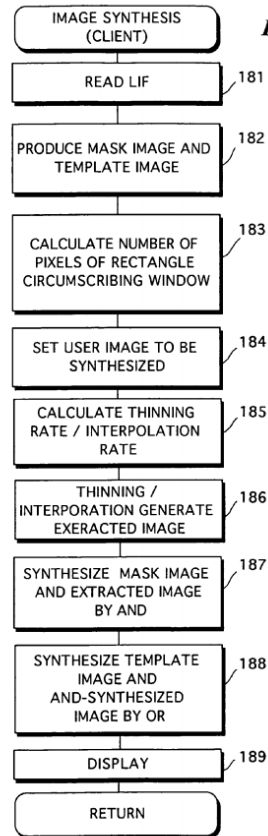
The user of the client computer **40** selects a user image to be synthesized on a template image by designating its file name (step **171**).

(27:24-26, discussing user selection of images to be processed)

	<p>Image data representing an image desired by the user (a user image) out of image data representing a plurality of images stored in the hard disk in the client computer <b>40</b> is read out of the hard disk, and is expanded on the VRAM<b>82</b> in the client computer <b>40</b> (step <b>134</b>).</p> <p>(25:51-55, discussing retrieval of selected images from memory)</p> <p>Image data representing the user image which has been designated by the user is read out of the hard disk (step <b>172</b>). If the image data which has been read out is image data in a format which is not supported in the client computer <b>40</b> (NO at step <b>173</b>), an error is displayed on the display device <b>84</b> (step <b>174</b>).</p> <p>If the image data representing the user image which has been designated by the user is supported in the client computer <b>40</b> (YES at step <b>173</b>), it is expanded to a bit map file (steps <b>175</b> and <b>176</b>). When it is the image data that has already been expanded to the bit map file, the processing in the step <b>176</b> is skipped.</p> <p>(27:27-38, discussing reading out selected images if supported in client computer)</p>
(c) pre-processing said identified group of one or more items of digital content using said received pre-processing	Shiimori discloses pre-processing said identified group of one or more items of digital content using said received pre-processing parameters, said received pre-processing parameters controlling said client device in a placement of said identified group of one or more items of digital content into a specified form in preparation for publication to one or more devices that are remote from a server device and said client device; and



<p>parameters, said received pre-processing parameters controlling said client device in a placement of said identified group of one or more items of digital content into a specified form in preparation for publication to one or more devices that are remote from a server device and said client device; and</p>	<p><u>Invalidity Scenario 1</u></p> <p>The client computer of Shiimori processes image data according to the received editing template and mask information.</p> <p><i>See, e.g.:</i></p> <p>The editing template image data is transmitted from the main image server <b>30</b> to the client computer <b>40</b>. <u>In the client computer <b>40</b>, the user image represented by the user image data is synthesized on the template image represented by the transmitted editing template image data.</u> When the synthesis processing is thus performed, the user image data and synthesis information for performing the synthesis processing are transmitted from the client computer <b>40</b> to the main image server <b>30</b>.</p> <p>(23:64-24:6, discussing synthesis of the template and user images) (emphasis added)</p> <p>The editing template image represented by the editing template image data transmitted from the image server <b>30</b> and user image are synthesized in the client computer <b>40</b>, so that a composite image is generated (step <b>135</b>).</p> <p>(25:56-25:59, discussing generation of a composite image)</p>
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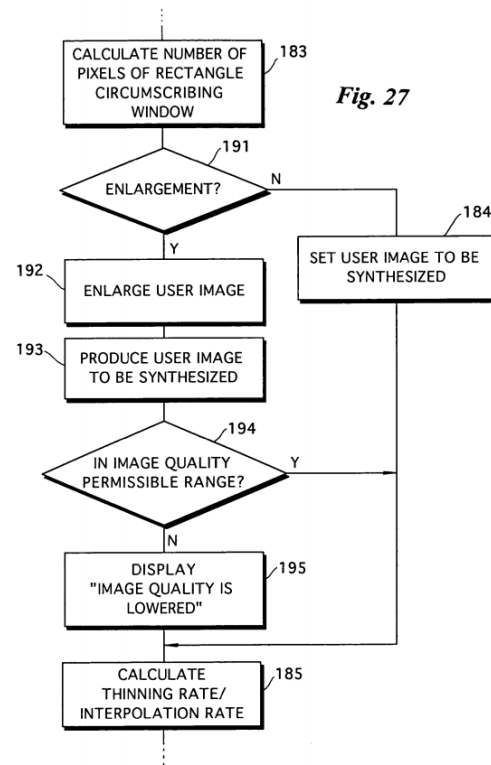


(Figures 25 and 26, outlining generation of composite image from template, mask and user images)

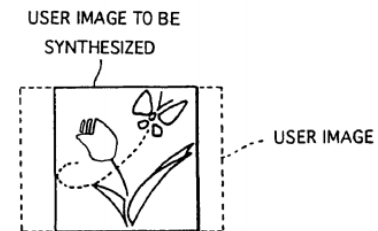
A pixel thinning rate or a pixel interpolation rate is calculated (step **185**) such that the size of the specified user image to be synthesized and the size of the rectangle circumscribing the window *W* coincide with each other. Pixel thinning (image reducing processing) is performed using the calculated thinning rate or pixel interpolation (image enlarging processing) is performed using the

calculated interpolation rate (step **186**) (the image obtained by this processing is referred to as an extracted image).

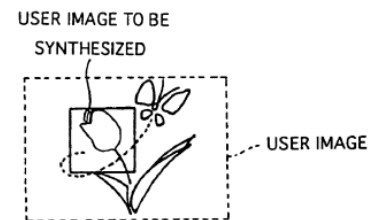
(28:8-17, discussing pixel thinning processing)



**Fig. 28a**



**Fig. 28b**



(Figures 27 and 28, outlining synthesis processing of only a portion of the user image)

Invalidity Scenario 2

The client computer of Shiimori reduces the resolution and quantity of image data to be transmitted to the image server according to constraints of the main image server's printer.

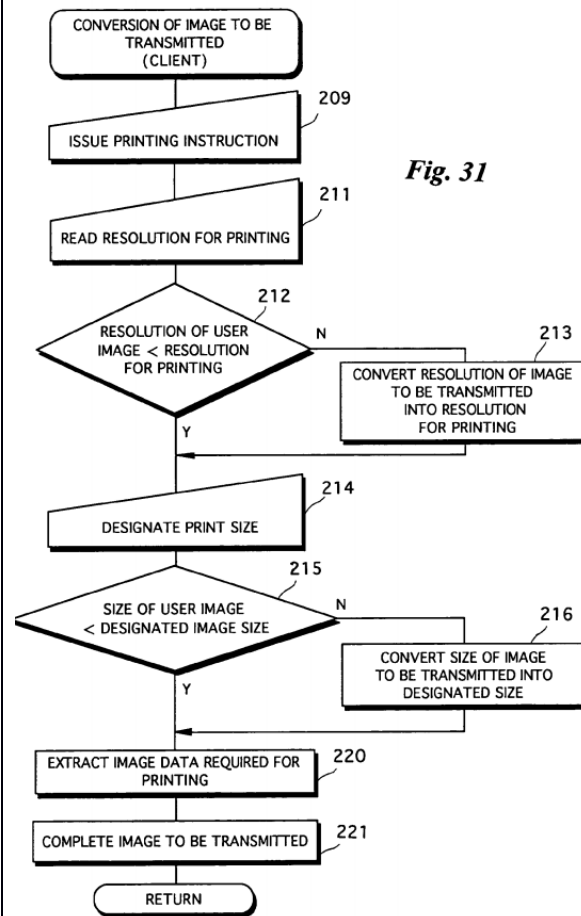
*See, e.g.:*

When image data is transmitted from the image server to the client computer, the resolution of image data to be transmitted is reduced in correspondence with the resolution of a monitor display device connected to the client computer. Further, the number of colors of an image represented by the image data is decreased in correspondence with the number of colors which can be displayed on the monitor display device. The data quantity of the image data to be transmitted is reduced, so that time required to transmit the image data is shortened.

(Abstract, discussing reduction of image resolution and quantity of data in preparation for transmission)

When the composite image is generated in the client computer **40**, user image and synthesis information (information relating to an image to be transmitted) are transmitted from the client computer **40** to the image server **30** in order to print the composite image in the image server **30**. Upon this transmission processing, conversion (thin-out or reducing) processing, described later, is performed such that the quantity of image data representing the user image is reduced (step 140). Since the quantity of the image data is reduced, time required to transmit the image data is shortened. Further, image quality selection processing, described later, is performed.

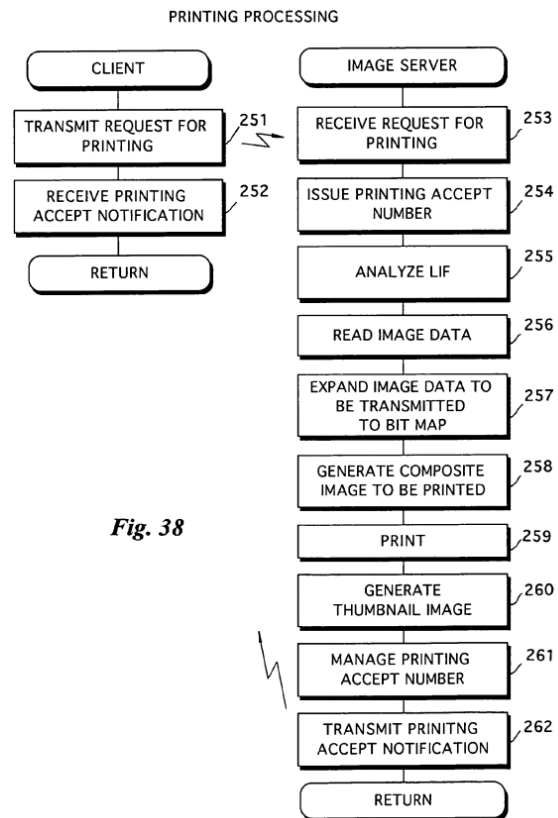
(26:1-12, discussing reducing quantity of data to be transmitted from client computer to image server)



(Figure 31, outlining reduction of resolution and quantity of data for transmission)

	<p>The resolution of the high-quality printer <b>90A</b> and the resolution of user image used in the composite image are compared with each other (step <b>212</b>). If the resolution of the high-quality printer <b>90A</b> is lower than the resolution of the user image, the data quantity of the image data can be reduced by making the resolution of the user image used in the composite image equal to the resolution of the high-quality printer <b>90A</b>. Therefore, image data conversion processing is performed such that the resolution of the user image used in the composite image is equal to the resolution of the high-quality printer <b>90A</b> (step <b>213</b>).</p> <p>(30:12-30:22, discussing reduction of image resolution before transfer, in accordance with the resolution of the high-quality printer)</p> <p>For example, when the resolution of the user image is 1800 dpi, and the resolution of the high-quality printer <b>90A</b> is 1200 dpi, the image data thinning (conversion) processing is performed such that the resolution of the user image is 1200 dpi. If the resolution of the high-quality printer <b>90A</b> is higher than the resolution of the user image, the processing in the step <b>213</b> is skipped.</p> <p>(30:22-29, discussing example in which user image resolution is reduced from 1800 dpi to 1200 dpi, in accordance with the resolution of the high-quality printer)</p> <p>The print size of a composite image is then designated by the user (step <b>214</b>). When the print size designated by the user (for example, the size which is one-fourth the standard print size) is smaller than the print size which is predetermined in the main image server <b>30</b> (the standard print size), image data thinning (conversion) processing is performed such that printing into the print size which is equal to the image size designated by the user can be realized (step <b>216</b>). Since the print</p>
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	<p>size is reduced, the data quantity of the image data to be transmitted from the client computer <b>40</b> to the main image server <b>30</b> is reduced.</p> <p>(30:30-40, discussing data thinning to reduce data quantity of image data in accordance with size requirements of the image server)</p>
<p>(d) transmitting said pre-processed group of one or more items of digital content to said server device for subsequent publishing to said one or more devices that are remote from said server device and said client device.</p>	<p>Shiimori discloses transmitting said pre-processed group of one or more items of digital content to said server device for subsequent publishing to said one or more devices that are remote from said server device and said client device.</p> <p><i>See, e.g.:</i></p> <p>The image data to be transmitted from the client computer <b>40</b> to the main image server <b>30</b> is thus generated. The generated image data to be transmitted is temporarily stored in the RAM <b>74</b> (step <b>221</b>).</p> <p>(30:50-54, discussing pre-processing image data for transmission)</p> <p>Image data representing a user image (image data representing the user image is reduced in quantity, as required, described above, and is compressed) (synthesis information is included as information relating to image data to be transmitted) which constitutes the composite image is transmitted as a request to print the composite image from the client computer <b>40</b> to the main image server <b>30</b> (step <b>251</b>).</p> <p>(32:19-25, discussing transmission of image data from client computer to main image server)</p>



(Figure 38, outlining print processing on main image server)



	<p>The composite image data thus generated is displayed on the display device <b>84</b> through the DA converter <b>83</b>, so that the composite image can be checked by an operator of the main image server <b>30</b>. <u>The composite image data is fed to the printer control circuit <b>89</b>, and is fed to the high-quality printer <b>90A</b>, where a high-quality composite image is printed (step <b>259</b>).</u></p> <p>(32:42-48, discussing printing from main image server) (emphasis added)</p>
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