

**EXHIBIT 1**  
**G1**

Appendix G1  
 Defendants and Counterclaimants' Invalidity Contentions  
*Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-0986-SI*

**U.S. Patent No. 6,784,879 Invalidity Chart: RCA ProScan Television PS35680 ("RCA ProScan")**

All asserted claims are anticipated by the RCA ProScan and/or are rendered obvious by it, either alone or in combination with other prior art described below and/or listed in Section I of Defendants' and Counterclaimants' Preliminary Invalidity Contentions and/or through modifications described below. Nothing in this invalidity chart should be construed as signifying or suggesting Defendants and Counterclaimants' adoption of or acquiescence in any claim scope and/or claim construction positions taken by Plaintiffs and Counterdefendants in this litigation.

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<b><u>Claim 11</u></b>	<b>RCA ProScan</b>
<b>Claim limitation</b>	
11. A video graphics processor comprising:  a processing unit; and  memory that stores programming instructions that, when read by the processing unit, causes the processing unit to	Assuming for present purposes (without admitting) that the preamble is a claim limitation, the RCA ProScan contains a video graphics processor that allows it to generate on-screen user menus, icons, and control panels.  The RCA ProScan contains a processing unit that performs various functions, including the generation of on-screen menus, icons, and control panels.  The RCA ProScan contains memory that stores programming instructions for performing various functions, including the generation of on-screen menus, icons, and control panels.
(a) provide a video control icon that is visible on the display, wherein the video control icon relates to live video that is being presented as a	The RCA ProScan provides a video control icon that is visible on the display and that relates to live video that is being presented as the background on the display. As shown in Figure 1, below, the "Audio Adjust" icon is an example of the claimed "video control icon":

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background on the display;

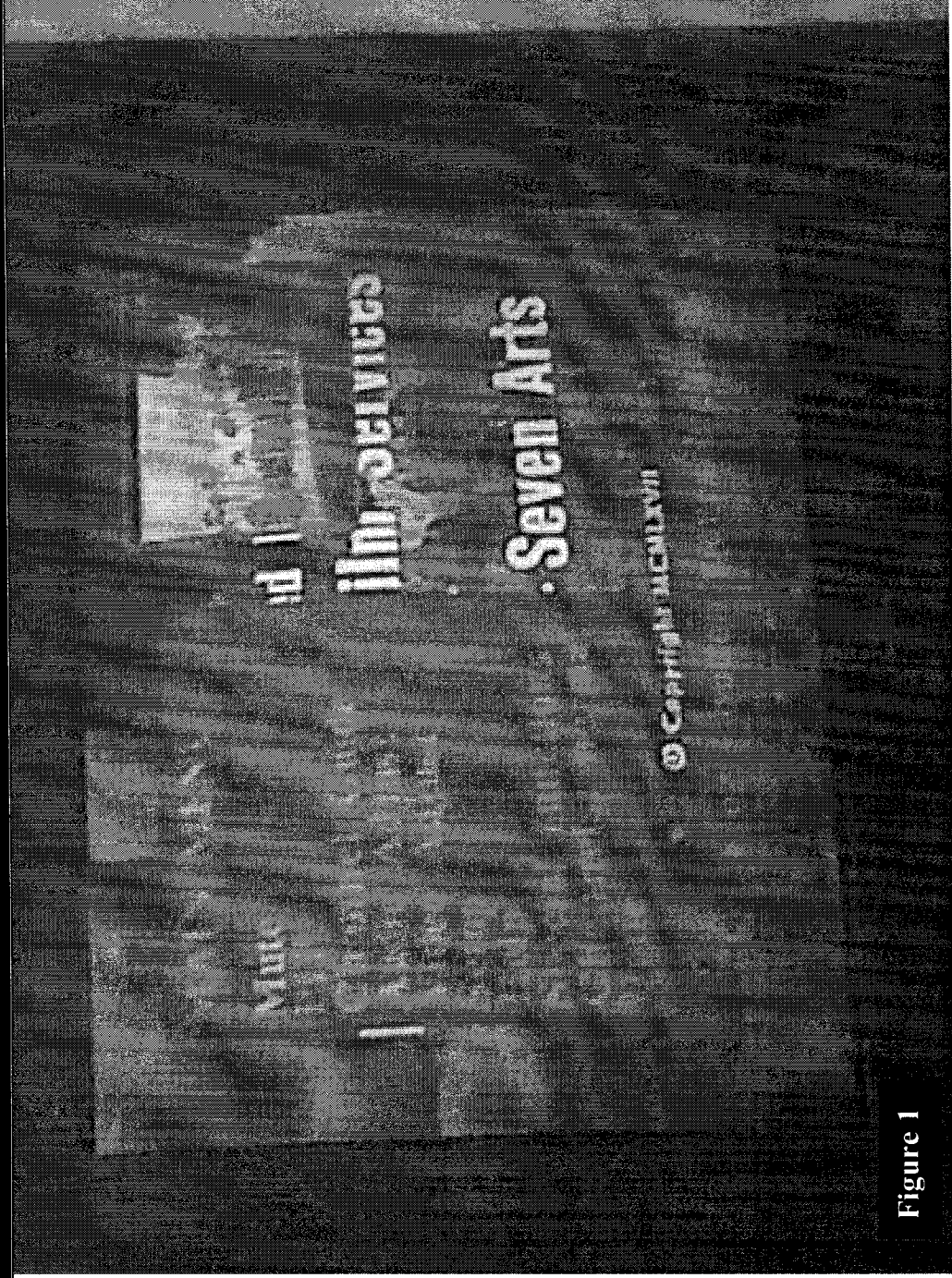
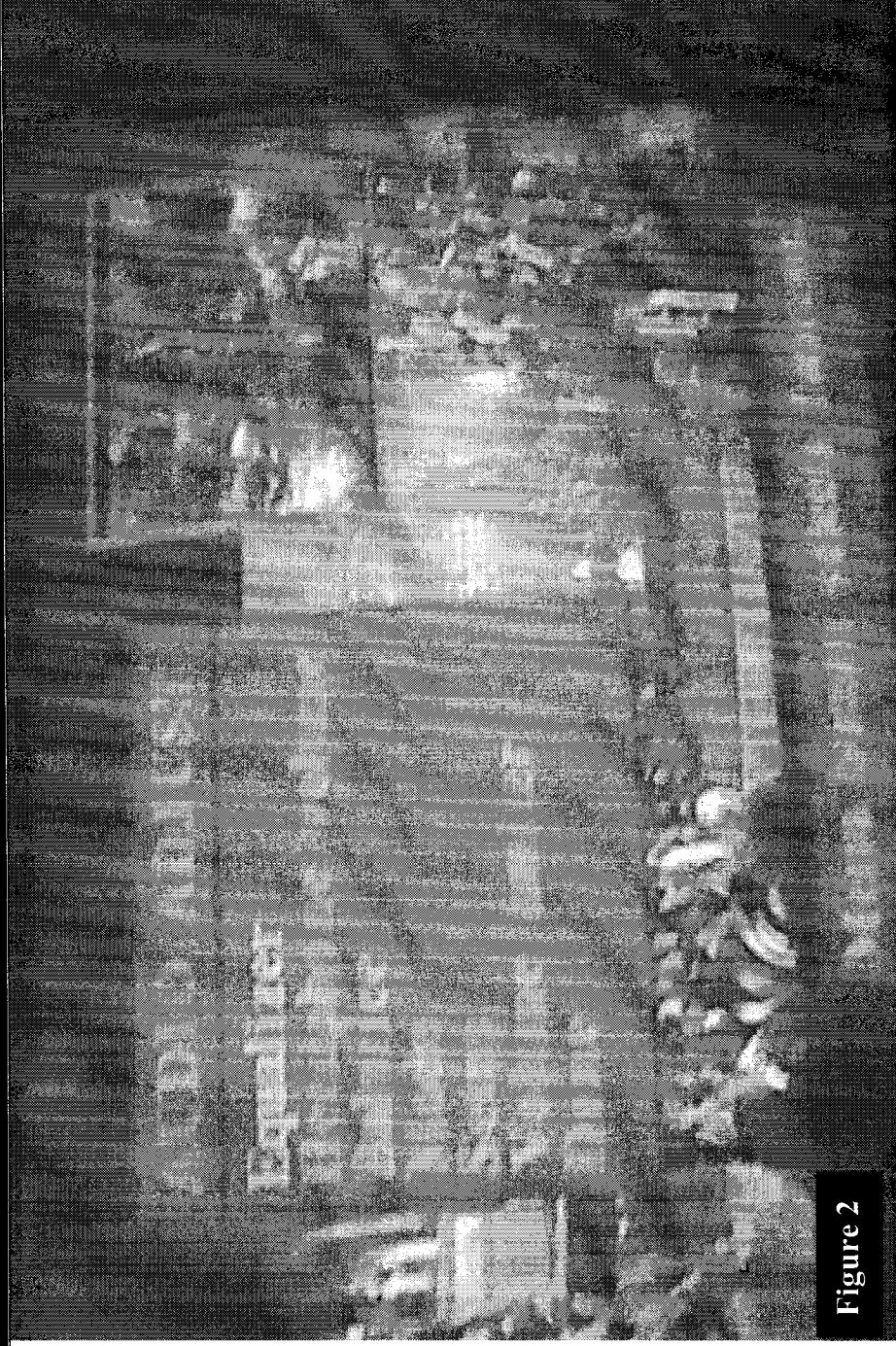


Figure 1

As a further example, as shown in the Figure 2, below, the "Headphone volume," "Balance," and "Volume Limiter" icons are examples of the claimed "video control icon.":

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These video control icons relate to the background video in that they control various attributes of the background video.

To the extent any of the above identified icons are determined not to be "video control icons" as that term is construed, providing "video control icons" would have been obvious in light of the RCA Pro Scan, either alone

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	<p>or in combination with the Microsoft Windows 95 reference, the Mass Microsystems Color Space SE combination, and or the prior art patents cited in Appendix G6.</p>
<p>(b) detect selection of the video control icon;</p>	<p>The video graphics processor in the RCA ProScan detects selection of the video control icon "Audio Adjust" when the "menu" button on the remote control is pressed.</p> <p>As a further example, the video graphics processor in the RCA ProScan detects selection of the video control icon "Headphone volume" when the "menu" button on the remote control is pressed.</p>
<p>(c) provide a control panel while the live video remains in the background</p>	<p>The video graphics processor in the RCA ProScan provides a control panel of sound controls, including "Headphone volume," "Balance," and "Volume Limiter," as shown in Figure 2, below:</p>

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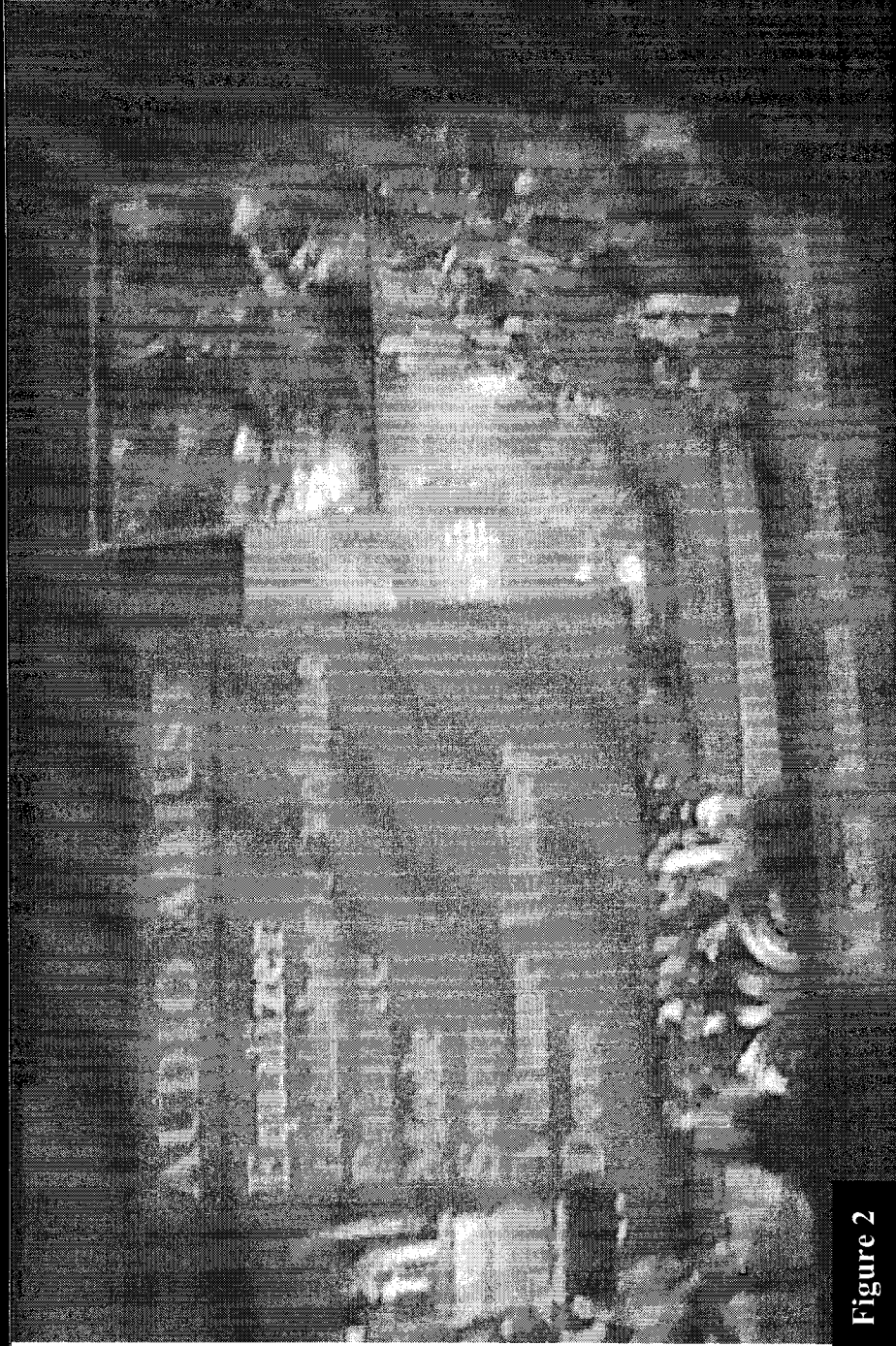


Figure 2

As a further example, the RCA ProScan provides the below control panel for "Volume limiter," when the "Volume limiter" icon is selected, as shown in Figure 3, below:

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and an application that  
was in focus remains in

The application that was in focus on the RCA ProScan display -- i.e., the picture-in-picture window -- remains

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<p>focus when the video control icon has been selected,</p>	<p>in focus when the video control icon has been selected, as shown in Figures 2 and 3, above.</p>
<p>wherein the control panel includes at least one of the following: a volume adjust icon, a mute icon, a pause icon, a rewind icon, and a fast-forward icon.</p>	<p>The control panel on the RCA ProScan includes several volume adjust icons, including "Headphone volume," "Balance," and "Volume limiter," as shown in Figure 2, above.</p> <p>To the extent, these icons are determined not to be "volume adjust icons," it would have been obvious to one of ordinary skill in the art to modify this reference to provide a "volume adjust icon," or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a "volume adjust icon."</p>
<p style="text-align: center;"><b><u>Claim 12</u></b></p>	
<p>The video graphics process of claim 11 further comprises,</p>	<p>See claim 11.</p>
<p>within the memory, programming instructions that, when read by the processing unit, causes the processing unit to provide, as the control panel, at least one of: volume adjust icon, mute icon, channel up icon, channel down icon, numerical channel</p>	<p>The RCA Pro Scan contains in its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to provide volume adjust icons, including "Headphone volume," "Balance," and "Volume Limiter," as shown in Figure 2, above.</p> <p>To the extent, these icons are determined not to be "volume adjust icons," it would have been obvious to one of ordinary skill in the art to modify this reference to provide a "volume adjust icon," or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a "volume adjust icon."</p>



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display, and alpha-numeric channel display.	
<b><u>Claim 13</u></b>	
The video graphics process of claim 11 comprises,	See claim 11.
within the memory, programming instructions that, when read by the processing unit, causes the processing unit to remove the control panel when another displayed element is selected.	The RCA ProScan has within its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to remove the control panel when another displayed element is selected. For example, when "Headphone volume" is selected, the control panel is removed, as shown in Figure 3, below:

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Figure 3

To the extent it is determined that the RCA ProScan does not disclose this limitation, it would have been obvious to one of ordinary skill in the art to implement this feature in light of the RCA ProScan, either alone or in combination with the Frox reference or the Mass Microsystems ColorSpace SE reference.

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**Claim 14**

<p>A video graphics processor comprising:</p>	<p>Assuming for present purposes (without admitting) that the preamble is a claim limitation, the RCA ProScan has a video graphics processor that allows it to generate on-screen user menus, icons, and control panels.</p>
<p>a processing unit; and</p>	<p>The RCA ProScan contains a processing unit that performs various functions, including the generation of on-screen menus, icons, and control panels.</p>
<p>memory that stores programming instructions that, when read by the processing unit, causes the processing unit to</p> <p>(a) detect selection of a video control icon,</p>	<p>The RCA ProScan stores in its memory programming instructions that cause the processing unit to detect selection of a video control icon, as shown in Figures 2 and 3, above.</p> <p>To the extent any of the above identified icons are determined not to be “video control icons” as that term is construed, providing “video control icons” would have been obvious in light of the RCA Pro Scan, either alone or in combination with the Microsoft Windows 95 reference, the Mass Microsystems Color Space SE combination, and or the prior art patents cited in Appendix G6.</p>
<p>wherein the video control icon relates to live video that is being presented as a background on a display;</p>	<p>The video control icons on the RCA ProScan, such as, for example, “Audio Adjust” and “Headphone Volume,” relate to the background video in that they control various attributes of the background video.</p>
<p>(b) provide a control panel while the live video remain [sic] the background and an application that was in focus remains in focus</p>	<p>When the “Audio Adjust” or “Headphone Volume” video control icons are selected, the RCA ProScan provides a control panel while the live video remains in the background and the picture-in-picture application that was in focus remains in focus, as shown in Figures 2 and 3, above.</p>

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<p>when the video control icon has been selected; and</p>	
<p>(c) adjust at least one attribute of the live video based on an input received via the control panel, wherein the at least one attribute included: volume, mute, pause, rewind, and fast-forward.</p>	<p>The control panel on the RCA ProScan receives input to adjust various attributes of the live video, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these controls are determined not to be attributes of volume, it would have been obvious to one of ordinary skill in the art to modify this reference to provide a volume control or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a volume control.</p>
<p><b><u>Claim 15</u></b></p>	
<p>The video graphics processor of claim 14 further comprises,</p>	<p>See claim 14.</p>
<p>within the memory, programming instructions that, when read by the processing unit, causes the processing unit to adjust the at least one attribute by adjusting at least one of: volume, mute, channel up, and channel</p>	<p>The RCA ProScan stores in its memory programming instructions that, when read and then executed by the processing unit, allow for the adjustment of various attributes, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these controls are determined not to be attributes of volume, it would have been obvious to one of ordinary skill in the art to modify this reference to provide a volume control or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a volume control.</p>

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	down.
<b><u>Claim 16</u></b>	
The video graphics processor of claim 14 further comprises,	See claim 14.
within the memory, programming instructions that, when read by the processing unit, causes the processing unit to remove the control panel when another displayed element is selected.	<p>The RCA ProScan has within its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to remove the control panel when another displayed element is selected. For example, when "Headphone volume" is selected, the control panel is removed, as shown in Figure 3, above.</p> <p>To the extent it is determined that the RCA ProScan does not disclose this limitation, it would have been obvious to one of ordinary skill in the art to implement this feature in light of the RCA ProScan, either alone or in combination with the Frox reference or the Mass Microsystems ColorSpace SE reference.</p>
<b><u>Claim 17</u></b>	
A digital storage device that stores programming instructions that, when read by a processing unit, causes the processing unit to provide control of background video, the	Assuming for present purposes (without admitting) that the preamble is a claim limitation, the RCA ProScan contains a digital storage device that stores programming instructions that, when read and then executed by the processing unit, cause the processing unit to provide control of background video.

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<p>digital storage device comprises:</p>	
<p>first storage means for storing programming instructions that, when read by the processing unit, causes the processing unit to provide a video control icon that is visible on the display, wherein the video control icon relates to live video that is being presented as a background on a display;</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and third storage means refer to regions of one or more storage devices and not to three separate and distinct memory devices, the RCA ProScan has memory for storing programming instructions that, when read and then executed by the processor, cause the processing unit to provide a video control icon that is visible on the display and that relates to live video that is being presented as a background display, as shown in Figures 1 and 2, above.</p> <p>To the extent any of the above identified icons are determined not to be “video control icons” as that term is construed, providing “video control icons” would have been obvious in light of the RCA Pro Scan, either alone or in combination with the Microsoft Windows 95 reference, the Mass Microsystems Color Space SE combination, and or the prior art patents cited in Appendix G6.</p>
<p>second storage means for storing programming instructions that, when read by the processing unit, causes the processing unit to detect selection of the video control icon; and</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and third storage means refer to regions of one or more storage devices and not to three separate and distinct memory devices, the RCA ProScan has memory for storing programming instructions that, when read and then executed by the processor, cause the processing unit to detect selection of the video control icon, as shown in Figures 2 and 3, above.</p>
<p>third storage means for storing programming</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and third storage means refer to regions of one or more storage devices and not to three separate and distinct memory devices, the RCA</p>

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<p>instructions that, when read by the processing unit, causes the processing unit to provide a control panel while the live video remains in the background and an application that was in focus remains in focus when the video control icon has been selected.</p>	<p>ProScan has memory for storing programming instructions that, when read and then executed by the processor, cause the processing unit to provide the control panel while the live video remains in the background and the foreground application -- i.e., the picture-in-picture display -- remains in focus when the video control icon has been selected, as shown in Figures 1, 2, and 3, above.</p>
<p><b><u>Claim 18</u></b></p>	
<p>The digital storage device of claim 17 further comprises</p>	<p>See claim 17.</p>
<p>means for storing programming instructions that, when read by the processing unit, causes the processing unit to provide, as the control panel, at least one of: volume adjust icon, mute icon, pause icon, rewind icon, and fast-</p>	<p>The RCA ProScan stores in its memory programming instructions that, when read and then executed by the processing unit, provide a control panel that has icons allowing for the adjustment of various attributes, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these icons are determined not to be "volume adjust icons," it would have been obvious to one of ordinary skill in the art to modify this reference to provide a "volume adjust icon," or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a "volume adjust icon."</p>

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forward icon.	
<b><u>Claim 19</u></b>	
The digital storage device of claim 17 further comprises	See claim 17.
means for storing programming instructions that, when read by the processing unit, causes the processing unit to provide, as the control panel, at least on of: volume adjust icon, mute icon, channel up icon, channel down icon, numerical channel display, and alpha-numeric channel display.	<p>The RCA ProScan stores in its memory programming instructions that, when read and then executed by the processing unit, provide a control panel that has icons allowing for the adjustment of various attributes, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these icons are determined not to be “volume adjust icons,” it would have been obvious to one of ordinary skill in the art to modify this reference to provide a “volume adjust icon,” or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a “volume adjust icon.”</p>
<b><u>Claim 20</u></b>	
The digital storage device of claim 17 further comprises	See claim 17.



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<p>means for storing programming instructions that, when read by the processing unit, causes the processing unit to remove the control panel when another displayed element is selected.</p>	<p>The RCA ProScan has within its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to remove the control panel when another displayed element is selected. For example, when "Headphone volume" is selected, the control panel is removed, as shown in Figure 3.</p> <p>To the extent it is determined that the RCA ProScan does not disclose this limitation, it would have been obvious to one of ordinary skill in the art to implement this feature in light of the RCA ProScan, either alone or in combination with the Frox reference or the Mass Microsystems ColorSpace SE reference.</p>
<p><b><u>Claim 21</u></b></p>	
<p>A digital storage device that stores programming instructions that, when read by a processing unit, causes the processing unit to provide control of background video, the digital storage device comprises:</p>	<p>Assuming for present purposes (without admitting) that the preamble is a claim limitation, the RCA ProScan contains a digital storage device that stores programming instructions that, when read and then executed by the processing unit, cause the processing unit to provide control of background video.</p>
<p>first storage means for storing programming instructions that, when read by the processing unit, causes the</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and second storage means refer to regions of one or more storage devices and not to two separate and distinct memory devices, the RCA ProScan has memory for storing programming instructions that, when read and then executed by the processor, cause the processing unit to detect selection of a video control icon that relates to live video that is being</p>

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<p>processing unit to detect selection of a video control icon, wherein the video control icon relates to live video that is being presented as a background on a display;</p>	<p>presented as a background display, as shown in Figures 1 and 2, above.</p> <p>To the extent any of the above identified icons are determined not to be “video control icons” as that term is construed, providing “video control icons” would have been obvious in light of the RCA Pro Scan, either alone or in combination with the Microsoft Windows 95 reference, the Mass Microsystems Color Space SE combination, and or the prior art patents cited in Appendix G6.</p>
<p>second storage means for storing programming instructions that, when read by the processing unit, causes the processing unit to provide a control panel while the live video remains in the background and an application that was in focus remains in focus when the video control icon has been selected; and</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and second storage means refer to regions of one or more storage devices and not to two separate and distinct memory devices, the RCA ProScan has memory for storing programming instructions that, when read and then executed by the processing unit, cause the processing unit to provide a control panel while the live video remains in the background and while a foreground application -- i.e., the picture-in-picture window -- remains in focus when the video control icon has been selected, as shown in Figures 1 and 2, above.</p>
<p>second storage means for storing programming instructions that, when</p>	<p>Assuming for present purposes (without conceding) that the claimed first, second, and second storage means refer to regions of one or more storage devices and not to two separate and distinct memory devices, the RCA ProScan has memory for storing programming instructions that, when read and then executed by the processing unit, cause the processing unit to adjust at least one attribute of the live video based on an input received via the</p>

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<p>read by the processing unit, causes the processing unit to adjust at least one attribute of the live video based on an input received via the control panel.</p>	<p>control panel, as shown in Figures 2 and 3, above.</p>
<p><b><u>Claim 22</u></b></p>	
<p>The digital storage device of claim 21 further comprises</p>	<p>See claim 21.</p>
<p>means for storing programming instructions that, when read by the processing unit, causes the processing unit to adjust the at least one attribute by adjusting at least one of: volume, mute, pause, rewind, and fast-forward.</p>	<p>The RCA ProScan stores in its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to adjust various attributes of the live video, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these controls are determined not to be attributes of volume, it would have been obvious to one of ordinary skill in the art to modify this reference to provide a volume control or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a volume control.</p>
<p><b><u>Claim 23</u></b></p>	
<p>The digital storage device of claim 21</p>	<p>See claim 21.</p>

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<p>further comprises</p> <p>means for storing programming instructions that, when read by the processing unit, causes the processing unit to adjust the at least one attribute by adjusting at least one of: volume, mute, channel up, and channel down.</p>	<p>The RCA ProScan stores in its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to adjust various attributes of the live video, including Headphone volume, Balance, and Volume limiter, as shown in Figure 2, above.</p> <p>To the extent, these controls are determined not to be attributes of volume, it would have been obvious to one of ordinary skill in the art to modify this reference to provide a volume control or to combine this reference with either the FroxSystem prior art reference or the Microsoft Windows 95 reference to provide a volume control.</p>
<p><b><u>Claim 24</u></b></p>	
<p>The digital storage device of claim 21 further comprises</p>	<p>See claim 21.</p>
<p>means for storing programming instructions that, when read by the processing unit, causes the processing unit to remove the control panel when another displayed element is</p>	<p>The RCA ProScan has within its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to remove the control panel when another displayed element is selected. For example, when "Headphone volume" is selected, the control panel is removed, as shown in Figure 3, above.</p> <p>To the extent it is determined that the RCA ProScan does not disclose this limitation, it would have been obvious to one of ordinary skill in the art to implement this feature in light of the RCA ProScan, either alone or in combination with the Frox reference or the Mass Microsystems ColorSpace SE reference.</p>

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