

EXHIBIT 1

G2

Appendix G2
 Defendants and Counterclaimants' Invalidation 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 Invalidation Chart: The Frox System Home Entertainment System ("Frox")

All asserted claims are anticipated by the Frox 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 Invalidation 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.

U.S. Patent No. 6,784,879

<u>Claim 11</u>	Frox
Claim limitation	
11. A video graphics processor comprising:	Assuming for present purposes (without admitting) that the preamble is a claim limitation, the Frox contains a video graphics processor that allows it to generate on-screen user menus, icons, and control panels.
a processing unit; and	The Frox contains a processing unit that performs various functions, including the generation of on-screen menus, icons, and control panels.
memory that stores programming instructions that, when read by the processing unit, causes the processing unit to	The Frox 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 Frox 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 "Video" icon and the "Audio" icon are examples of the claimed "video control icon":

Appendix G2
Defendants and Counterclaimants' Invalidation Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-09886-SI

U.S. Patent No. 6,784,879

background on the display;

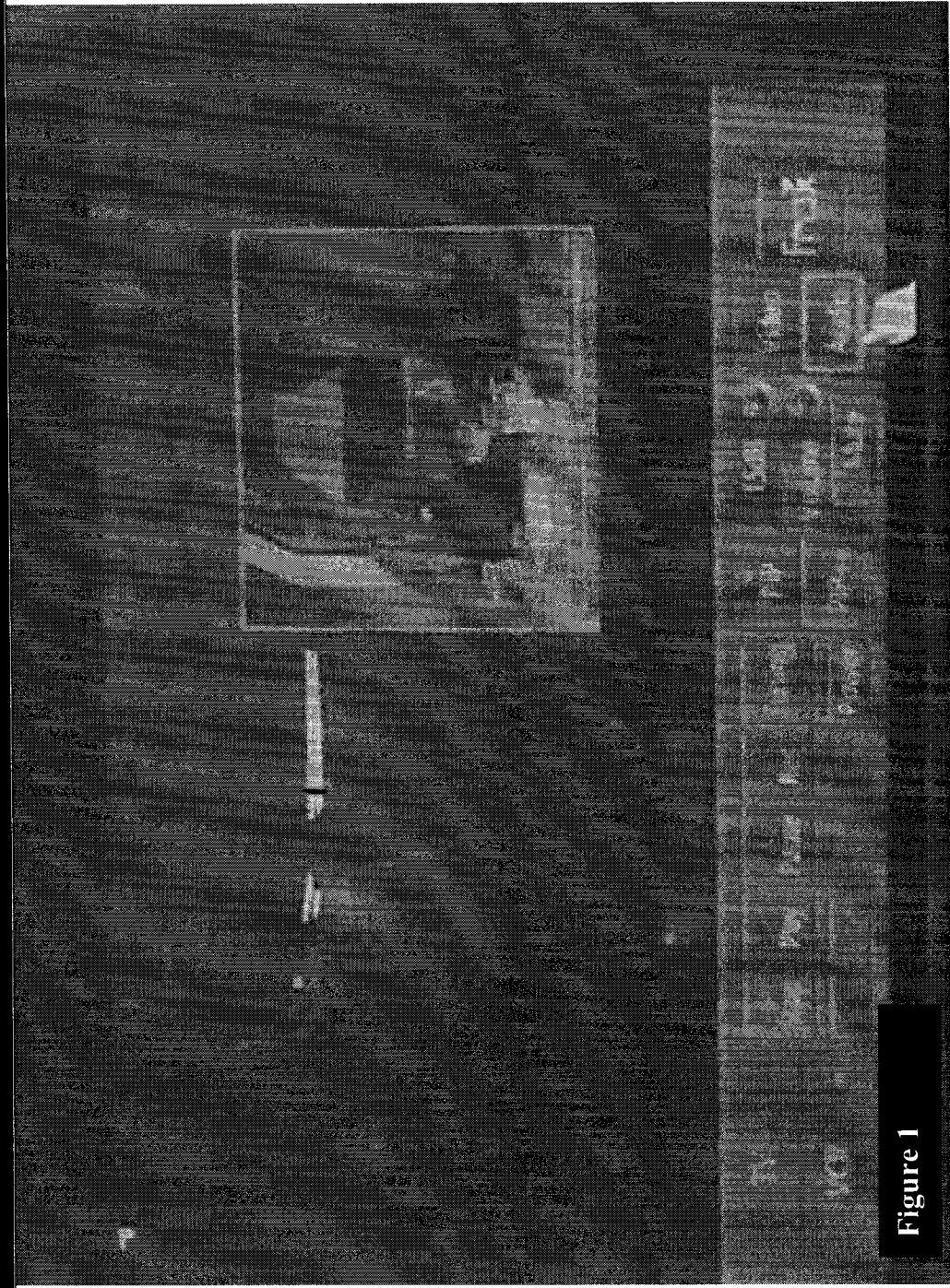


Figure 1

As a further example, as shown in the Figure 2, below, the "Transport" icon is an example of the claimed "video control icon.":

Appendix G2
Defendants and Counterclaimants' Invalidation Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-09866-SI

U.S. Patent No. 6,784,879



Figure 2

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

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

	<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 Frox, 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>(b) detect selection of the video control icon;</p>	<p>The video graphics processor in the Frox detects selection of the video control icon "Audio," as shown in Figure 1, above.</p> <p>As a further example, the video graphics processor in the Frox detects selection of the video control icon "Transport," as shown in Figure 2, above.</p>
<p>(c) provide a control panel while the live video remains in the background</p>	<p>Upon selecting the "Audio" video control icon, the video graphics processor in the Frox provides a control panel of sound controls, including a volume control measured in decibels as shown in Figure 3, below:</p>

Appendix G2
Defendants and Counterclaimants' Invalidation 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

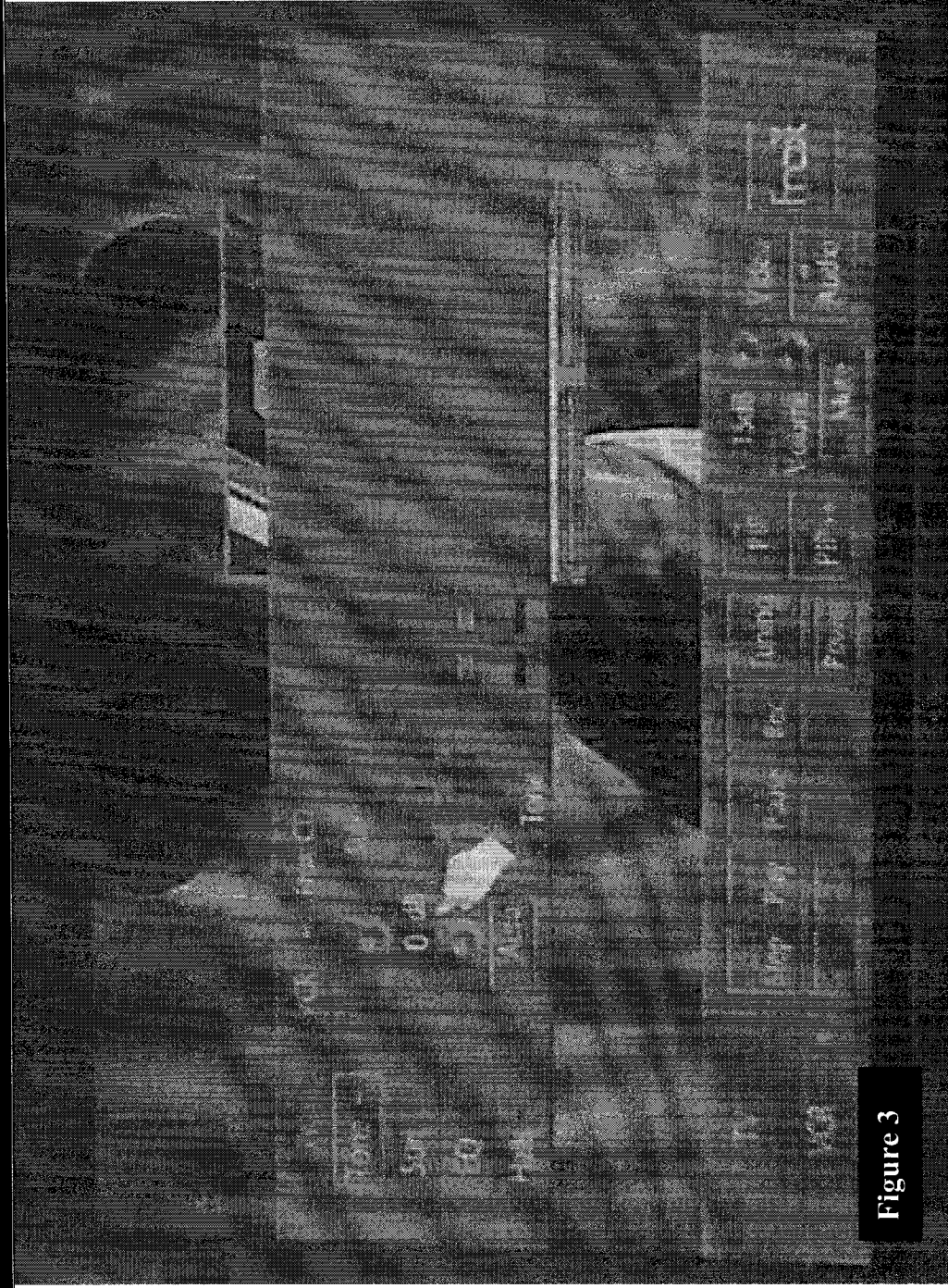


Figure 3

As a further example, the Frox provides a control panel including controls for fast-forward and rewind, as shown

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

in Figure 4, below:



and an application that was in focus remains in focus when the

The application that was in focus on the Frox display -- i.e., the picture-in-picture window -- remains in focus when the video control icon has been selected, as shown in Figures 3 and 4, above.

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<p>video control icon has been selected,</p>	<p>To the extent it is determined that the application that was in focus on the Frox is determined not to remain in focus, implementing such a feature would have been obvious to one of ordinary skill in the art in light of the Frox, either alone or in combination with the RCA ProScan reference, the Windows 95 prior art reference, or the Mass Microsystems Color Space SE combination.</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 panels on the Frox include several volume adjust icons, including volume in decibels, as shown in Figure 3, above, as well as a rewind icon and a fast forward icon, as shown in Figure 4, above.</p>
<p><u>Claim 12</u></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</p>	<p>The Frox contains in its memory programming instructions that, when read and then executed by the processing unit, cause the processing unit to provide volume adjust, fast-forward, and rewind icons, as shown in Figures 3 and 4, above.</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<p>icon, channel down icon, numerical channel display, and alpha-numeric channel display.</p>	
<p><u>Claim 13</u></p>	
<p>The video graphics process of claim 11 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 remove the control panel when another displayed element is selected.</p>	<p>The Frox 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 the "Halls" icon is selected, the control panel containing volume in decibels is removed.</p>
<p><u>Claim 14</u></p>	
<p>A video graphics processor comprising:</p>	<p>Assuming for present purposes (without admitting) that the preamble is a claim limitation, the Frox 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 Frox contains a processing unit that performs various functions, including the generation of on-screen menus, icons, and control panels.</p>

Appendix G2
 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

<p>memory that stores programming instructions that, when read by the processing unit, causes the processing unit to (a) detect selection of a video control icon,</p>	<p>The Frox stores in its memory programming instructions that cause the processing unit to detect selection of a video control icon, 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 Frox, 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 Frox, such as, for example, “Audio” and “Transport” 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 when the video control icon has been selected;</p> <p>and</p>	<p>When the “Audio” video control icon is selected, the Frox 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 Figure 3, above.</p> <p>As a further example, when the “Transport” video control icon is selected, the Frox 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 Figure 4, above.</p> <p>To the extent it is determined that the application that was in focus on the Frox is determined not to remain in focus, implementing such a feature would have been obvious to one of ordinary skill in the art in light of the Frox, either alone or in combination with the RCA ProScan reference, the Windows 95 prior art reference, or the Mass Microsystems Color Space SE combination.</p>
<p>(c) adjust at least one</p>	<p>The control panel on the Frox receives input to adjust various attributes of the live video, including volume in</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<p>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>decibels, as shown in Figure 3, above, and fast-forward and rewind, as shown in Figure 4, above.</p>
<p style="text-align: center;"><u>Claim 15</u></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 down.</p>	<p>The Frox stores in its memory programming instructions that, when read and then executed by the processing unit, allow for the adjustment of various attributes, including volume, fast-forward, and rewind, as shown in Figures 3 and 4, above.</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<u>Claim 16</u>	
<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 remove the control panel when another displayed element is selected.</p>	<p>The Frox 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 "Halls" is selected, the control panel containing volume in decibels is removed.</p>
<u>Claim 17</u>	
<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</p>	<p>Assuming for present purposes (without admitting) that the preamble is a claim limitation, the Frox 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>

Appendix G2
 Defendants and Counterclaimants' Invalidation Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-09886-SI

U.S. Patent No. 6,784,879

<p>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 Frox 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 Frox, 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 programming 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 Frox 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 1 and 2, 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 Frox has</p>

U.S. Patent No. 6,784,879

<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>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 3 and 4, above.</p> <p>To the extent it is determined that the application that was in focus on the Frox is determined not to remain in focus, implementing such a feature would have been obvious to one of ordinary skill in the art in light of the Frox, either alone or in combination with the RCA ProScan reference, the Windows 95 prior art reference, or the Mass Microsystems Color Space SE combination.</p>
<p><u>Claim 18</u></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 Frox 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 volume in decibels, fast-forward, and rewind, as shown in Figures 3 and 4, above.</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

forward icon.	
<u>Claim 19</u>	
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.	The Frox 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 volume in decibels, fast-forward, and rewind, as shown in Figures 3 and 4, above.
<u>Claim 20</u>	
The digital storage device of claim 17 further comprises	See claim 17.

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<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 Frox 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 "Halls" is selected, the control panel containing volume in decibels is removed.</p>
<p><u>Claim 21</u></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 Frox 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 Frox 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 presented as a</p>

Appendix G2
 Defendants and Counterclaimants' Invalidity Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-09886-SI

U.S. Patent No. 6,784,879

<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>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 Frox, 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 Frox 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 3 and 4, above.</p> <p>To the extent it is determined that the application that was in focus on the Frox is determined not to remain in focus, implementing such a feature would have been obvious to one of ordinary skill in the art in light of the Frox, either alone or in combination with the RCA ProScan reference, the Windows 95 prior art reference, or the Mass Microsystems Color Space SE combination.</p>
<p>second storage means for storing programming</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 Frox has memory for storing programming instructions that, when read and then executed by the processing unit, cause</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-09886-SI

U.S. Patent No. 6,784,879

<p>instructions that, when 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>the processing unit to adjust at least one attribute of the live video based on an input received via the control panel, as shown in Figures 3 and 4, above.</p>
<p><u>Claim 22</u></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 Frox 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 volume in decibels, fast-forward, and rewind, as shown in Figures 3 and 4, above.</p>

Appendix G2
 Defendants and Counterclaimants' Invalidation 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

<u>Claim 23</u>	
The digital storage device of claim 21 further comprises	See claim 21.
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.	The Frox 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 volume in decibels, fast-forward, and rewind, as shown in Figures 3 and 4, above.
<u>Claim 24</u>	
The digital storage device of claim 21 further comprises	See claim 21.
means for storing programming instructions that, when read by the processing unit, causes the processing unit to	The Frox 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 "Halls" is selected, the control panel containing volume in decibels is removed.

Appendix G2
Defendants and Counterclaimants' Invalidation 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

remove the control panel when another displayed element is selected.