

Abstract

SYNCHRONIZING VIDEO OUTPUTS TOWARDS A SINGLE DISPLAY FREQUENCY

Method and system for synchronizing video output towards a single display frequency comprising providing a shared reference signal for synchronizing, at the single display frequency, video output between two or more image generator processors each driving at least one independent video card. Each of the video cards supports on-the-fly image refresh rate adaptation based on responsiveness from the corresponding image generator processor. The method also comprises, at each one of the image generator processors, artificially affecting, in real-time, image generation rendering speed during a next frame generation processing to trigger the on-the-fly image refresh rate adaptation by the one image generator processor's video card for proactively scheduling refresh of an image corresponding to the next frame by the one image generator processor's video card, thereby aligning the refresh of the image to the shared reference signal while avoiding manipulation of video card's memory registers by the one image generator processor.

Fig. 2