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(54) Title: METHOD AND SYSTEM FOR MULTIPLE 3-D GRAPHIC PIPELINE OVER A PC BUS

(57) Abstract: Method and system for improving the parallelization of image processing, using one or more parallelization modes, wherein the image that is displayed on at least one computer screen by one or more Graphic Processing Units. Software applications are provided for issuing graphic command and graphic libraries are provided for storing data used to implement the graphic commands. A Software Hub Drivers is provided for controlling a Hardware Hub, for interacting with the operation system of the computer and the graphic libraries, for performing real-time analysis of a data stream, from which frames of the image are generated, for determining the parallelization mode of each GPU, and for forwarding the data stream or a portion thereof to each GPU. GPU Drivers are provided for allowing the GPUs to interact with the graphic libraries and an I/O module is provided for interconnecting between the Software module and the Hardware Hub. graphic commands and the data stream or a portion thereof are distributed between the GPUs for each frame by the Hardware Hub, according to their relative complexity within the image, wherein the complexity is defined by the Software Hub Driver. The Software Hub Driver also composites a graphics output for display, using the outputs obtained from at least one GPU, while alternating, whenever required, the parallelization mode for the each frame.



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