



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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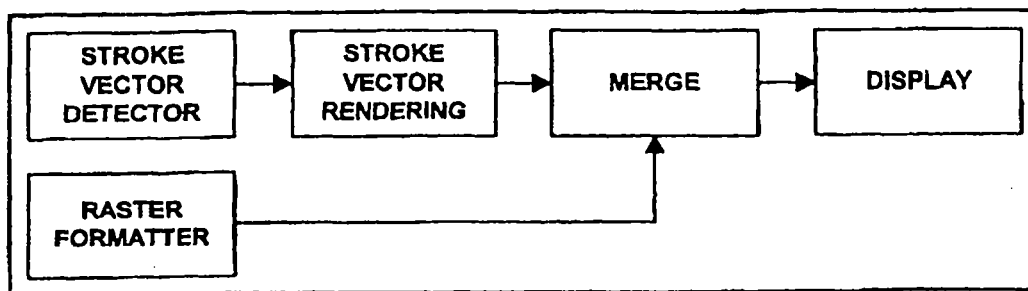


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(54) Title: METHOD OF AND SYSTEM FOR DETECTING AND RENDERING OF GRAPHIC ELEMENTS



## (57) Abstract

A method and system for a rendering engine architecture wherein graphics or other objects are detected and rendered for display to a user independent of the source of the graphics to be rendered is presented. Stroke vectors are detected and rendered as raster graphics symbology for use in, for example, monochrome or color flat panel display devices. In one embodiment, analog stroke video analog to digital conversion is performed by over-sampling stroke deflection and video signals relative to writing rate and display pixel resolution. Digitized stroke data is processed to create a display list of simple vectors. Rendering of graphics symbology with anti-aliasing is performed by graphics rendering of simple vectors with true anti-aliasing. For hybrid stroke/raster formats, raster video analog to digital conversion is performed by oversampling relative to input resolution and display pixel resolution. Graphics symbology and raster video are merged through digital summation with symbology precedence. The overall effect is that maximum quality of symbology with background video is realized using the fullest capabilities of a high resolution color flat panel display. Analog stroke symbology inputs can be converted to high-quality, anti-aliased symbology with raster video on a color flat panel display.