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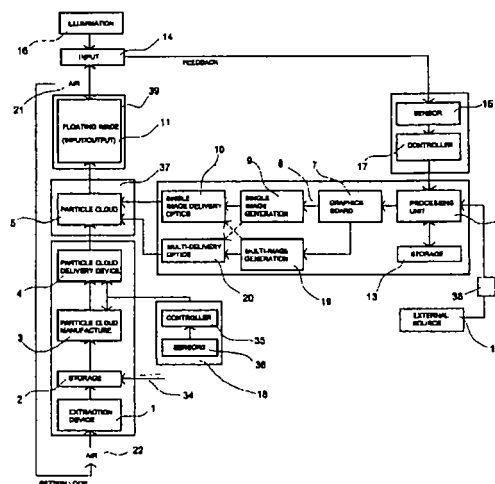
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR FREE-SPACE IMAGING DISPLAY AND INTERFACE



(57) Abstract: A method and system for displaying free-space, full color, high-resolution video or still images while simultaneously enabling the user to have real-time direct interaction with the visual images. The system comprises a self-generating means for creating a dynamic, non-solid particle cloud by ejecting atomized condensate present in the surrounding air, in a controlled fashion, into an invisible particle cloud. A projection system consisting of an image generating means and projection optics, projects an image onto the particle cloud. Any physical intrusion, occurring spatially within the image region, is captured by a detection system and the intrusion information is used to enable real-time user interaction in updating the image. This input/output (I/O) interface provides a display and computer link, permitting the user to select, translate and manipulate free-space floating visual information beyond the physical constraints of the device creating the image.



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