## पेटेंट कार्यालय शासकीय जर्नल

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(54) Title of the invention: VIRTUALLY REAL (VR) THREE-DIMENSIONAL REAL-TIME VISULIZATION WITH MULTIPLE SCREEN SWITCHING AND VIEW SWITCHING BETWEEN SCREEN AND SURGICAL TOOLS; AND A NOVEL HEAD MOUNTED DISPLAY (HMD)

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## (57) Abstract:

The present invention discloses virtually-real (VR) three-dimensional (3D) visualization of affected organ/tissue of the patient for surgical procedure. Particularly, the present invention relates to a virtually real (VR) three-dimensional (3D) real-time visualization of organ/tissue of the patient with screen switching between computed tomography, magnetic resonance imaging (MRI), ultrasound imaging, endoscopic imaging etc.; and allowing view switching between screen and surgical tools side by side which increases overall efficiency of surgical procedure. A novel head mounted display (HMD) is also disclosed. The innovative virtually-real (VR) three-dimensional (3D) real-time visualization with view switching and screen switching eliminates postural difficulties, eliminates the need of bulky set up, comprises simpler assembly, can be set up in reasonable costing and increases overall efficiency.

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