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(54) Title: A FREE SPACE "POP-OUT" & "SINK-IN" HOLOGRAM DEVICE TO CREATE, GENERATE, DISPLAY AND SHARE HIGH DEFINITION FREE SPACE "POP-OUT" & "SINK-IN" HOLOGRAMS WITH POP-OUT & SINK-IN HOLOGRAPHIC AUGMENTED REALITY (AR), VIRTUAL REALITY (VR) AND MIXED REALITY (MR)

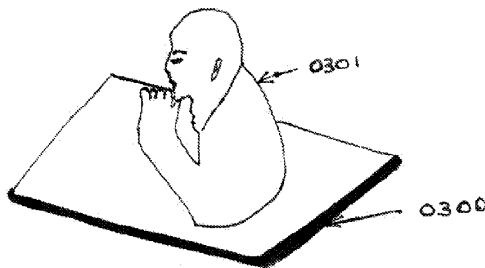


Fig.3

(57) Abstract: A unique method and a device to generate free space "pop-out" & "sink-in" holograms is disclosed herein. The hologram disclosed herein does not use any special medium, mirrors, reflective screens or wearables such as headgear & special glasses. The hologram disclosed herein can be created in free space, outer space or in air, without any other optical components except for the special display screen of the hologram device. This device demonstrates a free space hologram and the hologram Augmented Reality & hologram Virtual Reality. A camera capable of hologram quality images equipped with a smart lens which mimics the human eye by changing its lens aperture according to the light intensity as the pupil of the human eye and focus & capture "pop-out" & "sink-in" hologram images is disclosed herein. The audio which is incorporated with the device provide multi dimensional multi directional audio effects.

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