(19) INDIA

(22) Date of filing of Application :29/06/2022 (43) Publication Date : 15/07/2022

## (54) Title of the invention : A SYSTEM FOR REPLICATION OF AN AUGMENTED REALITY IMAGE AND TRANSMITTING AN AR IMAGE

## (57) Abstract:

The present invention relates to a system for replication of an augmented reality image through a display system, the eyepiece waveguide consisting of an optically transmissive substrate with a first and second surface, a first input coupling grating (ICG) region formed on or in one of the surfaces of the substrate, a first ICG region designed to receive an input beam of light and couple the input beam into the substrate as a guided beam, and a multi-directional pupil expander (MPE) region formed on or in the first ICG region, a first input coupling grating (ICG) region formed on or in one of the surfaces of the substrate, the first ICG region being configured to receive an input beam of light and to couple the input beam into the substrate as a guided beam.

No. of Pages: 14 No. of Claims: 2