ABSTRACT

A stereoscopic projection system comprises stereo-projectors with projection lenses for projecting the left and right picture of stereopair images onto a lenticular raster screen. The lenticular raster of the visualisation screen separates and focuses the images on corresponding vision areas of the left pictures for the left eyes and the right pictures for the right eyes of the spectators. The projectors include a beam-splitting system for forming a plurality of separate stereo-projections using a plurality of distinct optical systems wherein each of the optical systems includes two pairs of projection lenses for providing an individual stereo-projection to be viewed by a given spectator. The stereoscopic system further includes an automatic corrector connected to a sensor for monitoring the location coordinates of the eyes of each spectator. The automatic corrector comprises a lens actuator that performs an optical dynamic registration between the projections of the left and right stereopair images which are focused by the screen, and the predetermined vision areas of the stereoscopic images for the left and the right eyes of the spectators, respectively.