

ABSTRACT

The invention makes it possible to form a hologram for reproducing a three-dimensional image easily free of limitations placed by the size of the three-dimensional image to be reproduced, the size of the hologram and reference light for reproduction.

A controller calculates a three-dimensional interference pattern for generating reproduction light associated with a desired three-dimensional image when a recording medium (1) is illuminated with reference light for reproduction, divides the three-dimensional interference pattern into partial interference patterns and calculates reference light and information light for recording for each of the partial interference patterns. A final hologram is formed by illuminating the recording medium (1) with reference light and information light for recording using a head (10) while changing the relative positional relationship between the recording medium (1) and the head (10) by moving the head (10) with a VCM (13) while transporting the recording medium (1).