ABSTRACT

The present invention provides a transmission-type holographic optical storage medium and device, and a method for recording and reading on two sides of the holographic optical storage medium. The optical storage medium includes a first substrate, a second substrate, a recording layer and a dichroic layer. The recording layer is used for recording a hologram with data information. One side of the second substrate facing the recording layer is engraved with a concave-convex structure for a servo light beam to position a recording/reading position and achieve a servo track locking function. The dichroic layer can reflect the servo light beam and transmit recording/reading light. The storage medium according to the present invention is less susceptible to influence of external environment and is more stable compared with a conventional reflection-type storage medium. In addition, the first substrate, the second substrate, the recording layer and the dichroic layer of the holographic optical storage medium of the present invention are designed without a space therebetween, so that recording and reading on two sides can be achieved without separately designing a recording layer on both sides of the storage medium, thereby simplifying the processing technology thereof.

[FIG. 1]