ABSTRACT

In a phase-change recording medium, a recording medium is provided with a barrier layer including Ge-N, Ge-N-O between a recording layer and a dielectric protective layer in order to prevent a chemical reaction and an atom diffusion between the recording layer and the dielectric protective layer. A barrier material can be also applied to the protective layer itself. Thereby, it is possible to considerably suppress a reduction of a reflectivity and a reduction of a signal amplitude due to the repeat of recording and erasing, such reductions being observed in a conventional phase-change optical information recording medium, and thereby the number of overwriting times can be increased .