

TUNING EXCHANGE COUPLING IN MAGNETIC RECORDING MEDIA

Abstract

A magnetic recording medium having a substrate, a first magnetic layer and a second magnetic layer, in this order, wherein an exchange coupling in the first magnetic layer is lower than an exchange coupling in the second magnetic layer, and

5 the first and second magnetic layers are in a film stack so that magnetic grains in the first magnetic layer are exchange coupled by a pathway through the second magnetic layer is disclosed. A method of manufacturing a magnetic recording medium by obtaining a substrate, depositing a first magnetic layer at a first sputter gas pressure and depositing a second magnetic layer at a second sputter gas pressure, in this order,

10 wherein the first sputter gas pressure is higher than the second sputter gas pressure, and an exchange coupling in the first magnetic layer is lower than an exchange coupling in the second magnetic layer is also disclosed.

FIGURE 3