

## ABSTRACT

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### PERPENDICULAR MAGNETIC RECORDING MEDIUM

Disclosed is a perpendicular magnetic recording medium (103) comprising a soft underlayer (110), a recording layer (112) and an intermediate layer (111) between the soft underlayer (110) and the recording layer (112). The intermediate layer (111) comprises a first intermediate layer (117) of a Cr-alloy, and a second intermediate layer (118) of Ru or a Ru-alloy. In the preferred embodiment the Cr-alloy is formed by reactive sputter in the presence of Ar and N<sub>2</sub> gas, with a negative bias voltage applied during the reactive sputter process. A fabrication method is also disclosed. The arrangement of the intermediate layers of the embodiments disclosed results in better signal-to-noise ratio (SNR<sub>m</sub>).

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Figure 2

